Metadata Integration and Improvement Initiative (MI^3)

User's Guide

Version 2.5
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Submitted by

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Introduction

The Metadata Integration and Improvement Initiative (MI^3) project is a significant and complex development effort whose overall objective is the design of a flexible, extensible station history metadata database and maintenance interface to replace and enhance the functionality provided by the current SHIPS station history processing system.

Date Pairs – The "Heart" of MI^3

All station details (e.g., the Identity of a station, the Equipment installed at that station, the Phenomena observed at that station) have a period of validity. Furthermore, any of these station details may change independently of each other, thus resulting in different periods of validity for different station details.

For each station detail, MI^3 determines the begin date and the end date for which that detail is valid. It then creates an associated data record for that date pair. Data records containing related information are then displayed together. It is this date pair determination and subsequent record grouping that form the basis for all station data displayed within MI^3.

For example, Station XYZ is first made operational on March 6, 1972. It is initially assigned a COOP identifier of 123456. Twenty-five years later, on September 18, 1997, it is assigned a Call Sign of ABC. The station is still active today. When viewing the Identity information for that station, you would see two records with the following information:

Station Name	Begin Date	End Date	COOP ID	Call Sign
XYZ	1972-03-06	1997-09-18	123456	---
XYZ	1997-09-18	Current	123456	ABC

In other words, from 03/06/1972 until 09/18/1997, the station was known only by its COOP ID. From 09/18/1997 until today, it was known by both its COOP ID and its Call Sign.

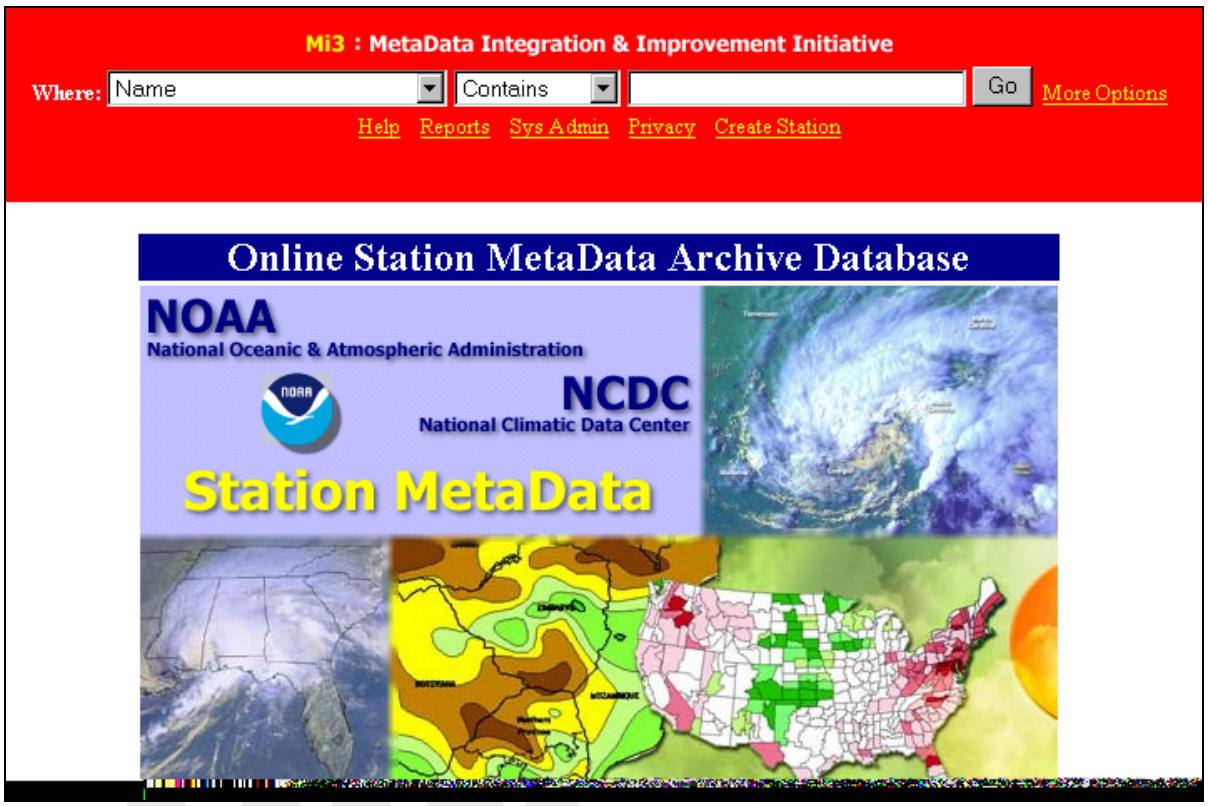
Login and Access

Access to the MI[3] application is granted via http://arachne.ncdc.noaa.gov/mi3stn/login.cfm. Once connected to this site, at the top of the screen, replace "guest" with your Login ID (username) and enter your Password. Click the **Login** button. If MI[3] does not recognize your login information, you will see an error message and have to click the **Back** button on your Web browser to try again. If you do not currently have an MI[3] account, please contact the MI[3] System Administrator to have one assigned.

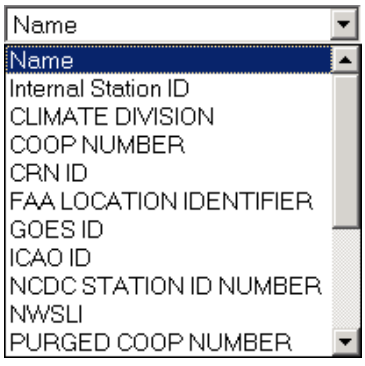
Each MI[3] user has a set of roles assigned that governs which features in MI[3] are available to the user. If you have not been granted access to a particular feature, either the link will not be available or you will receive an error message.

Initial Query

Upon successful login, you will be presented with the Initial Query screen:



Your search query requires three components: Identifier, Action, and Text. Select an Identifier for the first field (e.g., Name, COOP NUMBER, NCDC STATION ID NUMBER) from the drop-down list (shown below on the left). Then select an Action (e.g., Contains, Equals, Starts with) from the Action drop-down list (shown below on the right). The default search criteria for these two fields are Name Contains.



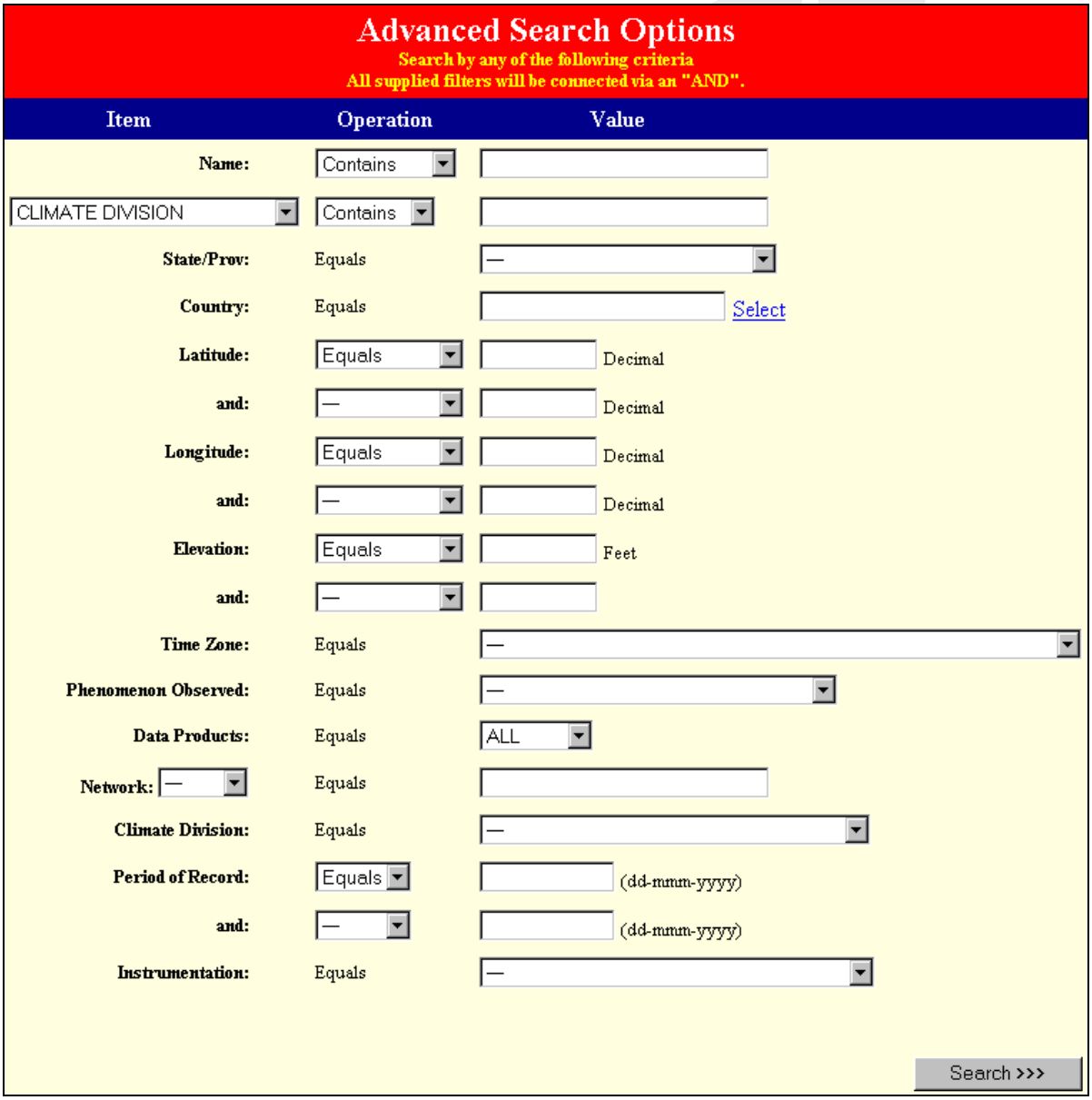
In the third box, enter the Text that completes the search query. You may search for stations by entering all or part of the desired station name, thus removing the need for wildcards. The search is not case-sensitive.

For example: Entering KEY *or* key *or* Key *will return stations including the following:*

- *Keyser, WV*
- *Whiskey Creek, AZ*
- *Sand Key, FL*

After you select and enter your search options, click the **Go** button to execute the search.

Selecting the **More Options** link to the right of the **Go** button accesses Advanced Search Options. Advanced Search Options allows you to search for a station using very specific identifying information or all stations that share similar identifying criteria. Click the **Search** button to execute the search.



Depending on the roles assigned to you, other links available on the Initial Query screen are:

Help The Help feature will be enabled in a future release.

Reports This link opens the Reports menu for generating station history, climatological data, hourly precipitation, and production reports. See the *Reports* section of this document.

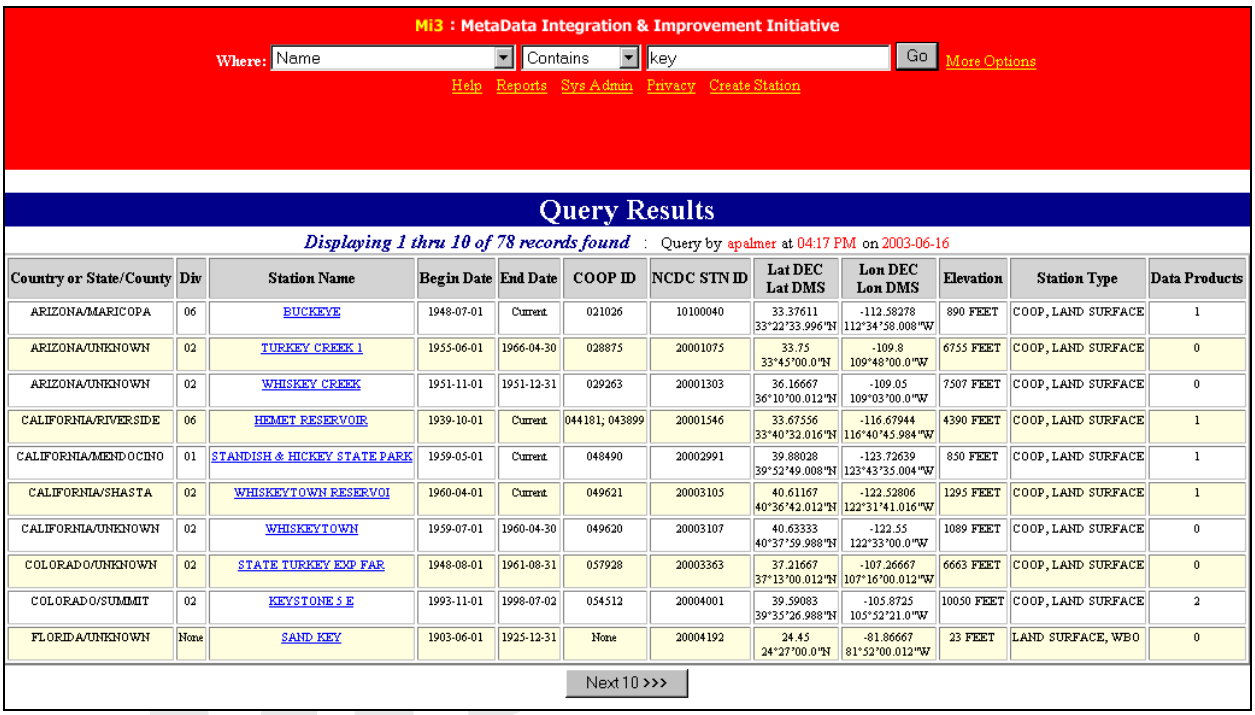
Sys Admin This link opens the Systems Administration Menu for managing users and session. See the *Systems Administration* section of this document.

Privacy This link will take you to NOAA's Privacy and Security Notice on the http://www.noaa.gov website.

Create Station This link is used to add a station to the database. See the *Editing MI^3 Data* section of this document.

Query Results

The results of your search are displayed in the Query Results grid. If there are more than ten results for your search, the first ten results of your search will be displayed. The next ten results can be accessed using the **Next 10** button located below the Query Results grid. Subsequent sets of ten results will also provide a **Previous 10** button to allow scrolling back through the results. In the example below, the first ten of 78 results are displayed.



Mi3 : MetaData Integration & Improvement Initiative

Where: Name | Contains | key | Go | More Options

Help Reports Sys Admin Privacy Create Station

Query Results

Displaying 1 thru 10 of 78 records found : Query by apalmer at 04:17 PM on 2003-06-16

Country or State/County	Div	Station Name	Begin Date	End Date	COOP ID	NCDC STN ID	Lat DEC Lat DMS	Lon DEC Lon DMS	Elevation	Station Type	Data Products
ARIZONA/MARICOPA	06	BUCKEYE	1948-07-01	Current	021026	10100040	33.37611 33°22'33.996"N	-112.58278 112°34'58.008"W	890 FEET	COOP, LAND SURFACE	1
ARIZONA/UNKNOWN	02	TURKEY CREEK 1	1955-06-01	1966-04-30	028875	20001075	33.75 33°45'00.0"N	-109.8 109°48'00.0"W	6755 FEET	COOP, LAND SURFACE	0
ARIZONA/UNKNOWN	02	WHISKEY CREEK	1951-11-01	1951-12-31	029263	20001303	36.16667 36°10'00.012"N	-109.05 109°03'00.0"W	7507 FEET	COOP, LAND SURFACE	0
CALIFORNIA/RIVERSIDE	06	HEMET RESERVOIR	1939-10-01	Current	044181; 043899	20001546	33.67556 33°40'32.016"N	-116.67944 116°40'45.984"W	4390 FEET	COOP, LAND SURFACE	1
CALIFORNIA/MENDOCINO	01	STANDISH & HICKEY STATE PARK	1959-05-01	Current	048490	20002991	39.88028 39°52'49.008"N	-123.72639 123°43'35.004"W	850 FEET	COOP, LAND SURFACE	1
CALIFORNIA/SHASTA	02	WHISKEYTOWN RESERVOI	1960-04-01	Current	049621	20003105	40.61167 40°36'42.012"N	-122.52806 122°31'41.016"W	1295 FEET	COOP, LAND SURFACE	1
CALIFORNIA/UNKNOWN	02	WHISKEYTOWN	1959-07-01	1960-04-30	049620	20003107	40.63333 40°37'59.988"N	-122.55 122°33'00.0"W	1089 FEET	COOP, LAND SURFACE	0
COLORADO/UNKNOWN	02	STATE TURKEY EXP FAR	1948-08-01	1961-08-31	057928	20003363	37.21667 37°13'00.012"N	-107.26667 107°16'00.012"W	6663 FEET	COOP, LAND SURFACE	0
COLORADO/SUMMIT	02	KEYSTONE 5 E	1993-11-01	1998-07-02	054512	20004001	39.59083 39°35'26.988"N	-105.8725 105°52'21.0"W	10050 FEET	COOP, LAND SURFACE	2
FLORIDA/UNKNOWN	None	SAND KEY	1903-06-01	1925-12-31	None	20004192	24.45 24°27'00.0"N	-81.86667 81°52'00.012"W	23 FEET	LAND SURFACE, WBO	0

Next 10 >>>

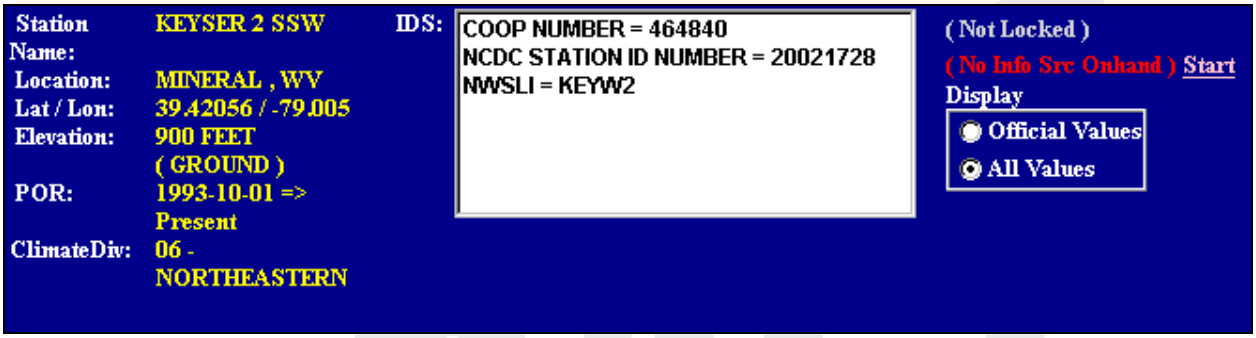
Contained within this grid are sufficient station data (e.g., Station Name, Station Type, Station IDs, Periods of Record) to allow you to locate the desired station. Clicking the station name in the Station Name column will open a detailed view of that station. If the desired station is not on the list, a new search may be initiated using the search fields at the top of the screen.

Detailed Station Information

Each Station Name on the Query Results screen is a hyperlink that opens a window with detailed station information. These details are organized into 11 specific functional areas, each with its own data tab (see *Station Information Tabs* below). The Query Results window remains open so you may refer to it or use it to open other stations.

Station Information Header

Station information that is applicable to all functional areas is displayed in the Station Header, which is a constant feature on all of the Information Tabs.



The left side of the Header displays location and period of record (POR) information. The center box contains the list of IDs for the station. The right-hand information indicates whether the station is being edited and what category of data is being displayed.

If a user is currently editing the selected station, the Station Lock status in the upper right-hand portion of the header changes from **Not Locked** to **Locked by username**. If the station is locked by another user, you will be allowed to only view station data. See the *Editing MI³ Data* section for additional information.

MI³ tracks the source of new or updated station information. Whether an Information Source has been provided is indicated below the Station Lock status. In the example above, **No Info Src** is **Onhand**. See the *Editing MI³ Data* section for additional information.

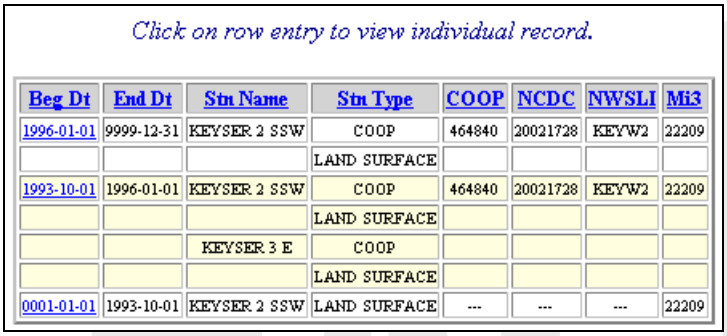
The radio buttons in the Display box allow you to select whether you wish to view only **Official Values**, validated data, or **All Values**, which may include unofficial data. MI³ is designed to allow data to be loaded without affecting existing data. By designating these records as "unofficial," users can examine the new data in relation to the existing data prior to integrating it. All data entered by a user is "official."

Grid View vs. Detail View

Due to the detailed, complex nature of the station information being displayed, MI^3 offers two ways to view the data, Grid View and Detail View.

Grid View

The Grid View contains summary information for the selected tab, displaying data for all station-specific records. This is the first view presented on each Information Tab. Below is an example of an Identity Tab grid view. To focus on a particular record, click the date link for the desired record.

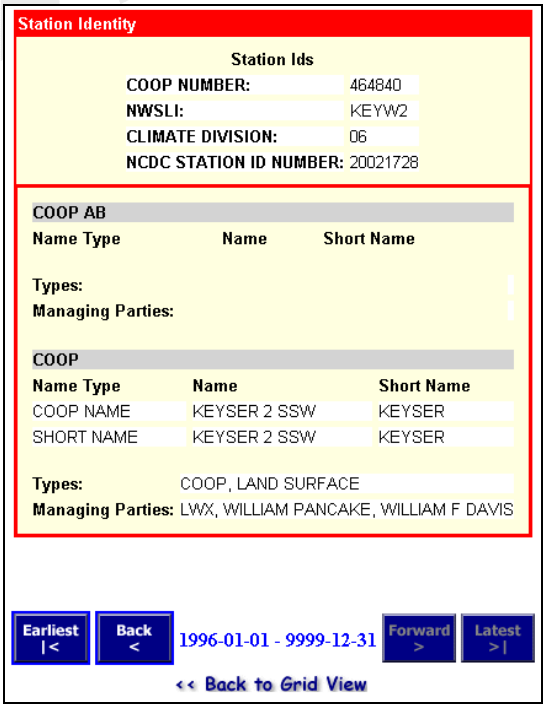


Click on row entry to view individual record.

Beg Dt	End Dt	Stn Name	Stn Type	COOP	NCDC	NWSLI	Mi3
1996-01-01	9999-12-31	KEYSER 2 SSW	COOP	464840	20021728	KEYW2	22209
			LAND SURFACE				
1993-10-01	1996-01-01	KEYSER 2 SSW	COOP	464840	20021728	KEYW2	22209
			LAND SURFACE				
		KEYSER 3 E	COOP				
			LAND SURFACE				
0001-01-01	1993-10-01	KEYSER 2 SSW	LAND SURFACE	---	---	---	22209

Detail View

The Detail View contains detailed information for a specific station record. The detail view of the 1996-01-01 entry in the grid view above is shown below. Use the **Back**, **Forward**, **Earliest** and **Latest** buttons to navigate to additional detail records. The Detail View may contain hyperlinked text to view further detail. To return to the summary view, use the **Back to Grid View** link.



Station Identity

Station Ids

COOP NUMBER:	464840
NWSLI:	KEYW2
CLIMATE DIVISION:	06
NCDC STATION ID NUMBER:	20021728

COOP AB

Name Type	Name	Short Name
Types:		
Managing Parties:		

COOP

Name Type	Name	Short Name
COOP NAME	KEYSER 2 SSW	KEYSER
SHORT NAME	KEYSER 2 SSW	KEYSER
Types:	COOP, LAND SURFACE	
Managing Parties:	LWX, WILLIAM PANCAKE, WILLIAM F DAVIS	

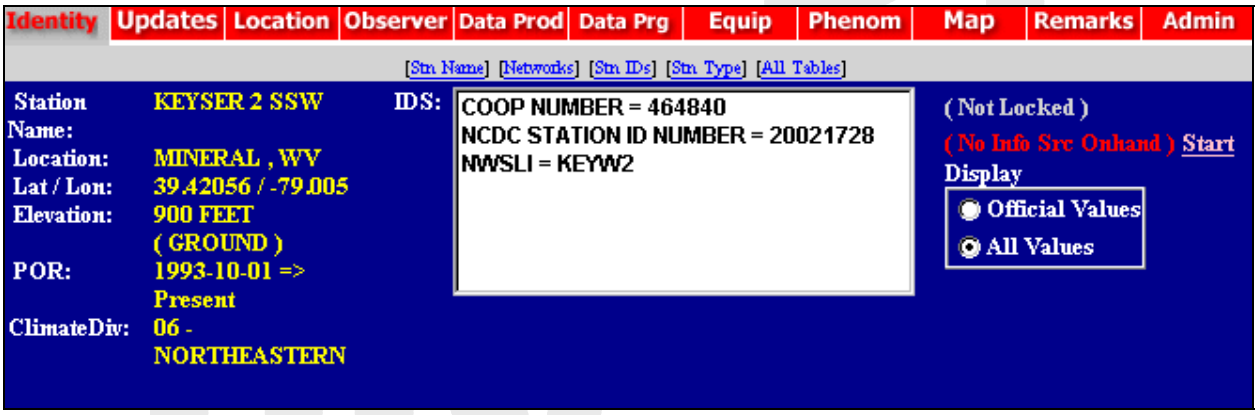
Earliest |< Back < 1996-01-01 - 9999-12-31 Forward > Latest >|

<< Back to Grid View

Station Information Tabs

When you select a specific station to view from the Query Results grid, a new window with Detailed Station Information will open. Details about the station are separated into 11 subject areas, accessed by the Station Information Tabs located above the Station Information Header. The actual number of tabs you see displayed depends on the roles assigned to you. The 11 Information Tabs are:

- Identity
- Updates
- Location
- Observer
- Data Products (Data Prod)
- Data Program (Data Prg)
- Equipment (Equip)
- Phenomena (Phenom)
- Map
- Remarks
- Administrative (Admin)



The links immediately above the Header **IDS** box are specific to each Tab. These links are used for updating the records on each Tab. They are discussed in *Editing MI³ Data* below.

Identity

- Station Name(s)
- Station Identifiers (COOP ID, WBAN, Call Sign, etc.)
- Station Type

The data grid on the Identity Tab displays detailed information describing the various identifiers of the station (e.g., COOP ID, WBAN, Call Sign) as well as the station's type (e.g., ASOS, FAA). By default, the data grids are sorted in descending order by Begin Date. Clicking on the underlined column headers re-sorts the data by that column. The date pairs of Begin and End Date show the period of time that a particular set of identity information remained unchanged. An End Date of 9999-12-31 means the information is current. A Begin Date of 0001-01-01 typically means "unknown."

Beg Dt	End Dt	Stn Name	Stn Type	COOP	NCDC	NWSLI	Mi3
1996-01-01	9999-12-31	KEYSER 2 SSW	COOP	464840	20021728	KEYW2	22209
			LAND SURFACE				
1993-10-01	1996-01-01	KEYSER 2 SSW	COOP	464840	20021728	KEYW2	22209
			LAND SURFACE				
		KEYSER 3 E	COOP				
			LAND SURFACE				
0001-01-01	1993-10-01	KEYSER 2 SSW	LAND SURFACE	---	---	---	22209

In the example above of an Identity Tab data grid, the identity information for this station changed twice. For an unknown period of time until 1993-01-01, there was one station, KEYSER 2 SSW, identified by Station Type only. A second station, KEYSER 3 E, existed from 1993-10-01 through 1996-01-01. In addition, KEYSER 2 SSW acquired a second Station Type beginning on 1993-10-01.

Updates

- Description of Updates
- Source of Updates
- Update Entry Date

The Updates Tab shows the history of changes to the station record. The date of the change, the source of the change, the nature of the change, and the author of the change are examples of information tracked here.

Begin Date	End Date	Effective Date	Update Provided by	Source Description	Source Version	Description of Update	Update Applied by	Update Entry Date
1993-10-01	1995-04-21	---	---	B44	---	ESTABLISHMENT.	INITIAL SHIPS CONVERSION	2003-01-06
2003-01-23	9999-12-31	2003-01-23	APALMER	B44	4	TEST	APALMER	2003-01-23
-		2003-01-23	IMC	B44	6	TEST	APALMER	2003-01-23
2003-01-21	9999-12-31	2003-01-21	IMC	B44	1	---	APALMER	2003-01-21
2000-04-14	9999-12-31	2000-04-14	---	B44	5	10 COR EXPOSURE, TOPTGRAPHY & OBSERVATION ELEMENT SECTIONS	INITIAL SHIPS CONVERSION	2003-01-06
1998-10-20	2000-04-14	1998-10-20	---	B44	4	10. CHANGE GPS LAT/LON	INITIAL SHIPS CONVERSION	2003-01-06
1995-04-21	1996-01-01	1995-04-21	---	B44	2	10. CHANGE STATION MANAGEMENT SERVICES	INITIAL SHIPS CONVERSION	2003-01-06
1996-01-01	1998-10-20	1995-01-21	---	B44	3	04. EQP RLCTD 2.1 MI NW; 10. CHG OBSVR, INSTALL ROSA, CHG OBS, EQP,NET	INITIAL SHIPS CONVERSION	2003-01-06

Among the list of updates, you can see here the Identity, Location, and Phenomena changes noted in this section.

Location

- Climate Division
- County
- Elevation
- Latitude/Longitude
- Location Description
- Relocation Information
- Time Zone
- Topographic Details

The Location Tab contains detailed information about the location of the station (Latitude/Longitude, Elevation, County, Relocation, Climate Division, and Time Zone). It also identifies any distinct topographic features surrounding the station.

Beg Dt	End Dt	Latitude	Longitude	Elevation	Relocation	County	Climate Division	Time Zone
2003-03-17	9999-12-31	39.42056 (39°25'14"N)	-79.005 (79°00'18"W)	GROUND: 900 FEET	---	MINERAL	06 - NORTHEASTERN	EASTERN (+5)
		Location Description: OBSERVERS RESIDENCE OUTSIDE AND 2.3 MILES SSW OF PO AT KEYSER, WV						
		Topographic Details: LIGHTLY WOODED URBAN AREA						
2000-04-14	2003-03-17	39.42056 (39°25'14"N)	-79.005 (79°00'18"W)	GROUND: 900 FEET	---	MINERAL	06 - NORTHEASTERN	EASTERN (+5)
		Location Description: OBSERVERS RESIDENCE OUTSIDE AND 2.3 MILES SSW OF PO AT KEYSER, WV						
		Topographic Details: TOPO-MOUNTAINOUS.						
1998-10-20	2000-04-14	39.42056 (39°25'14"N)	-79.005 (79°00'18"W)	GROUND: 900 FEET	---	MINERAL	06 - NORTHEASTERN	EASTERN (+5)
		Location Description: OBSERVERS RESIDENCE OUTSIDE AND 2.3 MILES SSW OF PO AT KEYSER, WV						
		Topographic Details: TOPO-MOUNTAINOUS.						
1996-01-01	1998-10-20	39.41667 (39°25'00"N)	-79 (79°00'00"W)	GROUND: 900 FEET	---	MINERAL	06 - NORTHEASTERN	EASTERN (+5)
		Location Description: OBSERVERS RESIDENCE OUTSIDE AND 2.3 MILES SSW OF PO AT KEYSER, WV						
		Topographic Details: TOPO-MOUNTAINOUS.						
1996-01-01	1996-01-01	39.41667 (39°25'00"N)	-79 (79°00'00"W)	GROUND: 900 FEET	NW@ 1.6MILES	MINERAL	06 - NORTHEASTERN	EASTERN (+5)

From this grid, aside from pinpointing the station location by latitude and longitude, you also learn that this station is located 900 feet above sea level in a mountainous area. Beginning on 1996-01-01 the station relocated 2.1 miles NW, requiring adjustments to the Latitude and Longitude. The change that took place on 2000-04-14 is not readily apparent from this grid view. Clicking on the date links **1998-10-20** and **2000-04-14** to compare the detail views for those records reveals the change made.

Station Location *(click on data for more detail)*

Lat / Lon	39.42056 (39°25'14.016"N) / -79.005 (79°00'18.0"W) at primary location
Elevation	
GROUND:	900 FEET
Geographical Information	
Geo Region:	AMERICA, NORTH
Country:	UNITED STATES
State:	WEST VIRGINIA
County:	MINERAL
NWS Region:	EASTERN
WFO:	
Climate Division:	NORTHEASTERN
Time Zone:	EASTERN
Relocation:	None
Obstructions/ Exposure:	CRS 210/4 GARAGE 200-240/25-35/5 TREE 280/30/35 TREE 020/2/5
Other Regions:	
Topography:	TOPO-MOUNTAINOUS.
Location Description:	None

Earliest |< Back < 1998-10-20 - 2000-04-14 Forward > Latest >|

<< Back to Grid View

Station Location *(click on data for more detail)*

Lat / Lon	39.42056 (39°25'14.016"N) / -79.005 (79°00'18.0"W) at primary location
Elevation	
GROUND:	900 FEET
Geographical Information	
Geo Region:	AMERICA, NORTH
Country:	UNITED STATES
State:	WEST VIRGINIA
County:	MINERAL
NWS Region:	EASTERN
WFO:	
Climate Division:	NORTHEASTERN
Time Zone:	EASTERN
Relocation:	None
Obstructions/ Exposure:	CRS 210/6 HOUSE 180/21/32
Other Regions:	
Topography:	TOPO-MOUNTAINOUS.
Location Description:	None

Earliest |< Back < 2000-04-14 - 2003-03-17 Forward > Latest >|

<< Back to Grid View

From these two detail views, you can see that the change indicated in the grid view was a modification of the Obstructions/Exposure field. A summary of all changes to Station Information is also available on the Updates Tab (see *Updates* above). Additional Location details are available from the Location detail views by clicking on the hyperlinked text.

Observer

- Observer Names
- Observer Roles

The Observer Tab provides detailed information about the Observers for the station.

Beg Dt	End Dt	Observer Name	Role
1996-01-01	9999-12-31	WILLIAM F DAVIS	COOP STN OBSERVER BACKUP
		WILLIAM PANCAKE	COOP STN OBSERVER
1993-10-01	1996-01-01	JAMES E TAYLOR	COOP STN OBSERVER

Data Products

- Data Products Produced
- Observation Frequency
- Observation Times
- Phenomena Observed

The Data Prod Tab contains detailed information about the data products produced by the station, including the Phenomena observed and when.

Beg Dt	End Dt	Data Product	Frequency	Times of Observation	Phenomena
2000-04-14	9999-12-31	CLIMATOLOGICAL DATA	DAILY	0700	TEMPERATURE
			DAILY	0700	PRECIPITATION
1996-01-01	2000-04-14	CLIMATOLOGICAL DATA	DAILY	0700	TEMPERATURE
			DAILY	0700	PRECIPITATION
1993-10-01	1996-01-01	NOT PUBLISHED	---	---	---

Data Program

- Observation Frequency
- Participating Data Programs
- Phenomena Observed

The Data Prg Tab contains detailed information about the participating Data Programs for the station. Also identified here are the Phenomena observed, Frequency of observation, and the Data Products resulting from participation in a Data Program. Where available, information found in the Data Products column provides a direct link to the Data Products Tab (see above).

Beg Dt	End Dt	Data Program	Frequency	Phenomena	Data Products
2000-04-14	9999-12-31	COOP SOD	DAILY	PRECIPITATION	Yes
			DAILY	TEMPERATURE	
1996-01-01	2000-04-14	COOP SOD	DAILY	PRECIPITATION	Yes
			DAILY	TEMPERATURE	
1993-10-01	1996-01-01	COOP SOD	---	---	No

Equipment

- Elevation of Equipment
- Equipment Name
- Equipment Priority
- Equipment Type/Model/Serial Number

- Participating Data Program(s)
- Phenomena Observed

The Equip Tab displays detailed information describing the Equipment installed at the station. All Equipment Types, Names, and Models are listed here in addition to location-specific data for each equipment piece.

Beg Dt	End Dt	Equip Type	Equipment Model	Priority	Equipment Name	Phenomenon	Elevation	Serial Number	Data Program
1998-10-20	9999-12-31	PRCP	SRG	PRIMARY	STANDARD RAIN GAGE	PRECIPITATION	---	---	COOP SOD
		TEMP	MXMN		MAX-MIN THERMOMETERS	TEMPERATURE			
1996-01-01	1998-10-20	PRCP	SRG	PRIMARY	STANDARD RAIN GAGE	PRECIPITATION		---	COOP SOD
		TEMP	MXMN		MAX-MIN THERMOMETERS	TEMPERATURE			

Phenomena

- Equipment Model/Name
- Observation Frequency
- Observation Times
- Phenomena Observed
- Reporting Method

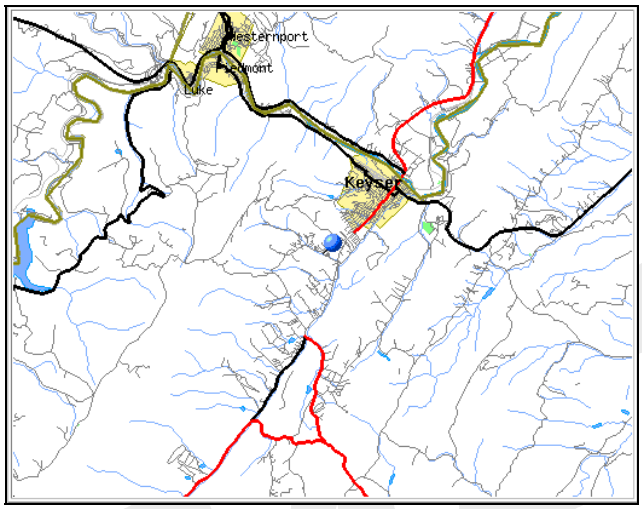
The Phenom Tab contains detailed information describing the Phenomena that the station observes (e.g., TEMPERATURE, PRECIPITATION). It also identifies the Frequency and the Times of these Observations, as well as the Primary Equipment used to measure each Phenomenon. Where available, information found in the Data Programs, Data Products, or Primary Equipment columns provide direct links to the corresponding Information Tab.

Beg Dt	End Dt	Phenomenon	Frequency	Times of Observation	Data Program	Data Products	Primary Equipment	Backup Equip?	Reporting Method
2000-04-14	9999-12-31	PRECIPITATION	DAILY	0700	COOP SOD	Yes	SRG / STANDARD RAIN GAGE	NO	B91
		TEMPERATURE		0700	COOP SOD		MXMN / MAX-MIN THERMOMETERS		B91
1996-01-01	2000-04-14	PRECIPITATION	DAILY	0700	COOP SOD	Yes	SRG / STANDARD RAIN GAGE	NO	B91
		TEMPERATURE		0700	COOP SOD		MXMN / MAX-MIN THERMOMETERS		B91

From the information in the data grid above, we learn that at 0700, the example station measures precipitation and temperature using a standard rain gage and maximum-minimum thermometers, respectively. Click the date links for the detail view to see further information.

Map

The Map Tab provides a graphical representation of the station's location. Shown here is the location of the Keyser 2 SSW station.



Remarks

- Additional Station Information
- Author and Date of Modifications to Remarks
- Authors of Remarks
- Context of Remarks
- Date Remarks Entered

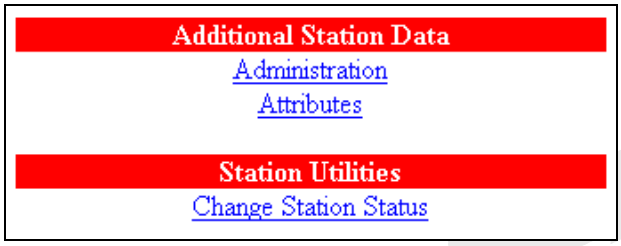
The Remarks Tab provides the opportunity to view and record additional station information. The author of the remark, the date it was entered/modified, as well as the remark itself are tracked on this tab. To add a remark, see *Editing MI^3 Data* below.

Beg Dt	End Dt	Context	Remark	Owner	Entered By	Entry Dt	Modified By	Mod. Date
1993-10-01	9999-12-31	RIVER BASIN (COOP NETWORK)	POTOMAC	NCDC	INITIAL SHIPS CONVERSION	2003-06-12	JKLEIN	---

Administrative

- Agents Responsible for Administering the Station
- Change Station Status
- Uncategorized Additional Station Information

The Admin Tab provides access to Station-level Data and Utilities.



Additional Station Data

- **Administration** – Identifies the agent(s) responsible for administering the station. The grid and detail view for the example station below show the agent information fields available.

Beg Dt	End Dt	NWS Region	NWS WFO	Operated By	Administered By
1996-01-01	9999-12-31	1	---	LWX	LWX

- **Attributes** – Provides a list of station data that was not automatically categorized with data on a specific Information Tab and provides for generic data entry points.

Beg Dt	End Dt	Information Type	Value
1996-03-01	9999-12-31	EXCEPTIONS	DIVISIONAL MEANS
-		EXCEPTIONS	HPD MEDIA
-		EXCEPTIONS	SEASONAL STATION
-		EXCEPTIONS	TEMP AT OBS
-		EXCEPTIONS	WTEQ
-		DRAINAGE CODE	---
1990-10-01	1996-03-01	EXCEPTIONS	DIVISIONAL MEANS
-		EXCEPTIONS	HPD MEDIA
-		EXCEPTIONS	SEASONAL STATION
-		EXCEPTIONS	TEMP AT OBS
-		EXCEPTIONS	WTEQ
-		DRAINAGE CODE	---
1972-01-01	1990-10-01	EXCEPTIONS	DIVISIONAL MEANS

Station Utilities

- **Change Station Status** – Allows the status of existing stations to be manually changed within MI³. See *Editing MI³ Data* below.

Editing MI^3 Data

MI^3 data can be edited from the links above the Station Header on each of the Information Tabs (except Map). Each Tab has links appropriate for the data on that Tab. The procedures described below for editing are similar for all of the Tabs. See *Information Tab Edit Links* below for a list of all edit links with related notes. Only users granted the appropriate privileges will be able to edit MI^3 Data.

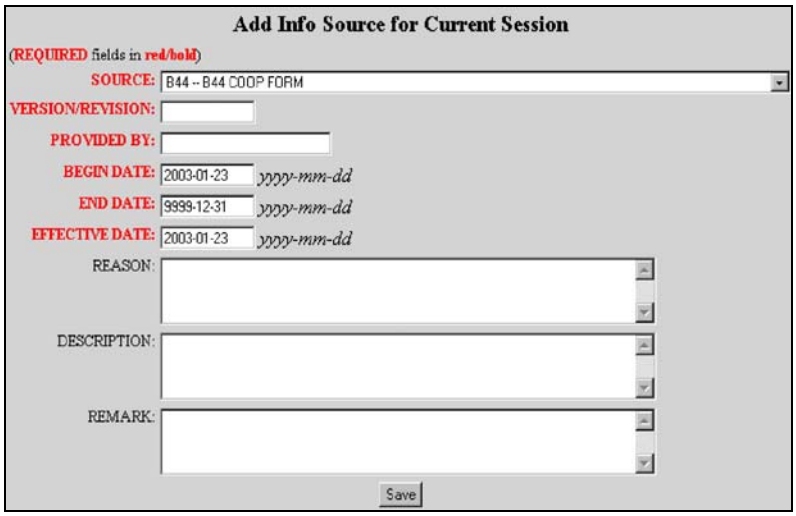
Locking the Station

When you click one of the edit links, you will be presented with a message box, shown below, informing you that you are acquiring a lock on the station. Click **OK**.

The station will remain locked until you or a System Administrator unlock it. While you have the station locked, no other user may edit the station. When you return to the Information Tab after saving your Information Source, the Header Lock Status will have changed to **Locked by username** (see example in *Information Source* below). When you have completed your edits and committed or cleared the changes, unlock the station by clicking **Unlock** next to the Lock Status. You will receive confirmation that the station has been unlocked. If you have any uncommitted changes, you will not be permitted to unlock the station. A **Show Uncommitted Changes** link will allow you to navigate to your uncommitted changes for action.

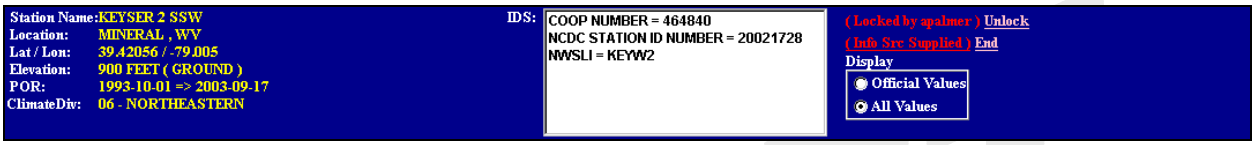
Information Source

Once you have locked the station, you need to supply an Information Source. MI^3 tracks the Source of new or updated station information. Prior to making changes to any station data, you must identify an Information Source. When you click one of the edit links, or the Info Source **Start** link, and no Information Source has been identified, MI^3 will prompt you to identify the Source prior to allowing the edit. Below is the Add Info Source form.



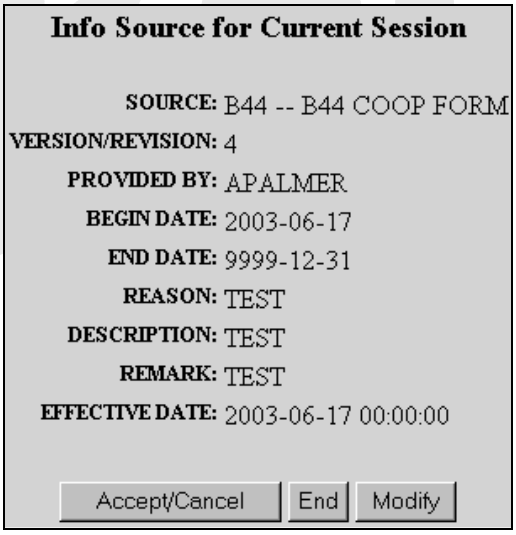
Note that certain fields on the Info Source form are required. The SOURCE is selected from the drop-down list. The default date pair is today's date and 9999-12-31 indicating "Current." The user may also enter a period of record for which the Information Source is valid. Text in the optional REASON, DESCRIPTION, and REMARK fields will appear on the Updates Tab. The Information Source identified will remain the default source for that user until it is manually changed. Click **Save** to continue with editing.

The Station Header, as shown below, will show that the **Info Source** is **Supplied**.



This Information Source will be applied to all editing you undertake until you manually end its use. To end using this Information Source, click the **End** link located to the right of **(Info Src Supplied)** on the Station Header.

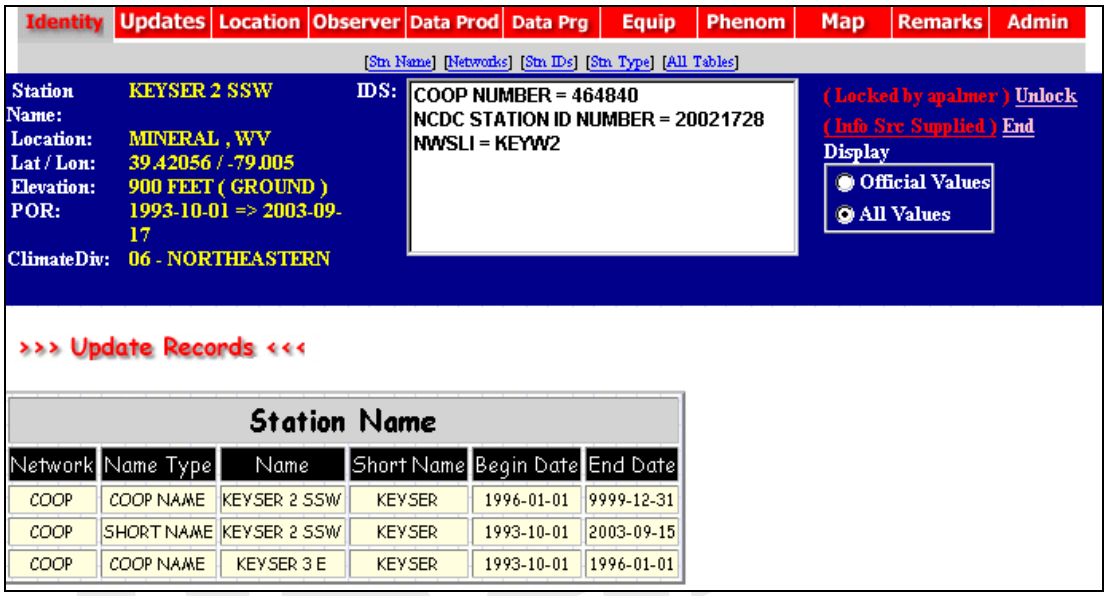
To check or modify your Information Source, click the **(Info Source Supplied)** link in the Station Header. You will receive the prompt shown below.



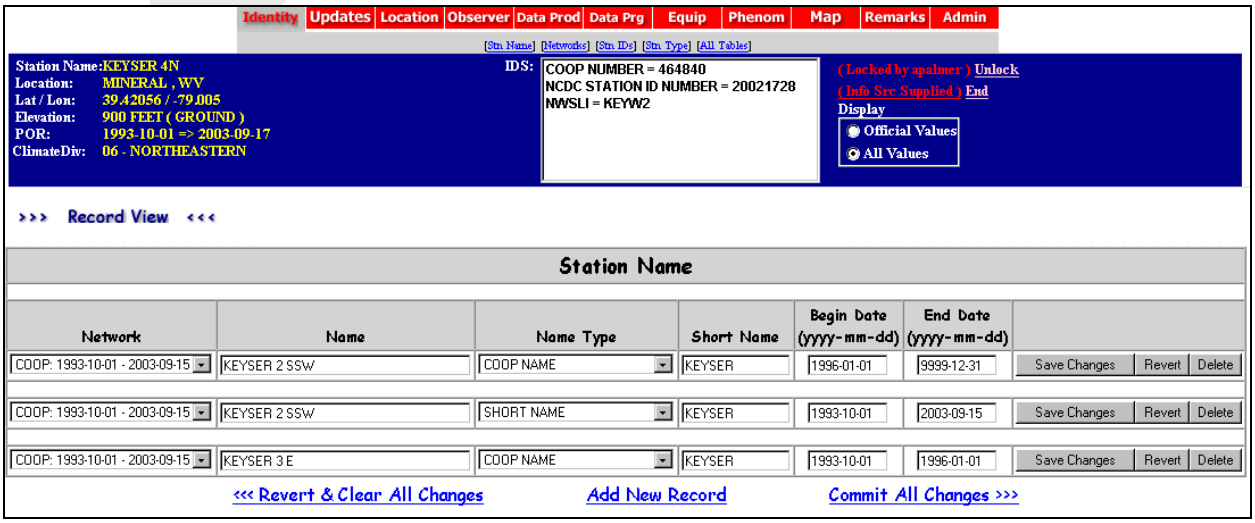
If you lock a station while you have an active Information Source, you will receive this prompt in order to confirm the Information Source. On this prompt, you may **Accept/Cancel** to keep the Information Source active; **End** to end using the identified Source; or **Modify** to make changes to your Source information. The **Modify** button will open a Modify Info Source form similar to the Add Info Source form shown above.

Record View and Update Records Tables

After you have confirmed your Information Source, you will be presented with either the Record View table or the Update Records table. If the Record View was the view last selected, this choice will be retained for each subsequent table view until the Update Records View is selected and vice versa. Below is the Record View table. The user has clicked the **Stn Name** edit link on the Identity Tab.



The Record View table displays all of the current data that may be edited using the link selected. Click the **>>>Update Records<<<** link located above the Record View grid to view the Update Records table shown below.

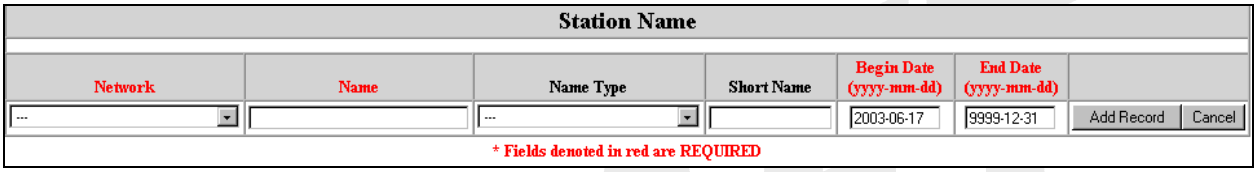


The Update Records table provides edit-ready fields for the data in the table and the ability to add and delete records (see topics below). Click the **>>>Record View<<<** link to view the Record View table.

Add New Record

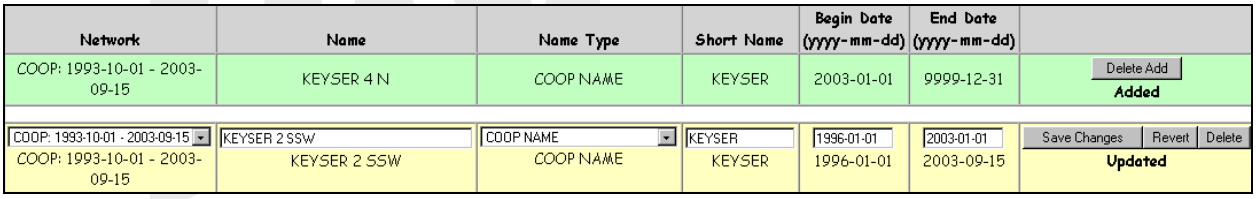
To add a new record to the database, navigate to the appropriate Update Records table. See topics above for information on edit links, locking the station, providing an information source, and displaying the Update Records table.

Click the **Add New Record** link located below the Update Records table. A new window opens with a record to be completed. The example below is for adding a station name.



Some fields may be filled with default information, but can be modified. In the example above, the Begin and End Date could be changed as appropriate.

Complete the fields and click the **Add Record** button to save your new record or **Cancel** to make no addition at this time. When you return to the Update Records table, your new record will be highlighted with the notation **Added,** see example below. If you decide not to keep the added record, click the **Delete Add** button.



If the record prior to the new record is being replaced by the new record, change the End Date for the record that is ending (see *Updating Records* below). By convention, the End Date for the ending record matches the Begin Date for the new record. In the example above, the Keyser 2 SSW Station is being replaced by the KEYSER 4 N Station. The KEYSER 4 N Station has been Added and the End Date for the KEYSER 2 SSW Station has been Updated to match the Begin Date for the new record.

If the new record is not replacing another record, but will run concurrently, no changes to the current records is required. MI3 will automatically update the Begin and End Dates of the affected records. The addition of a new record initiates a new period of validity, so all current records will end and, if they are to continue with the new record, will begin again on the new record Begin Date. (See *Date Pairs – The "Heart" of MI^3* for more information on this point.)

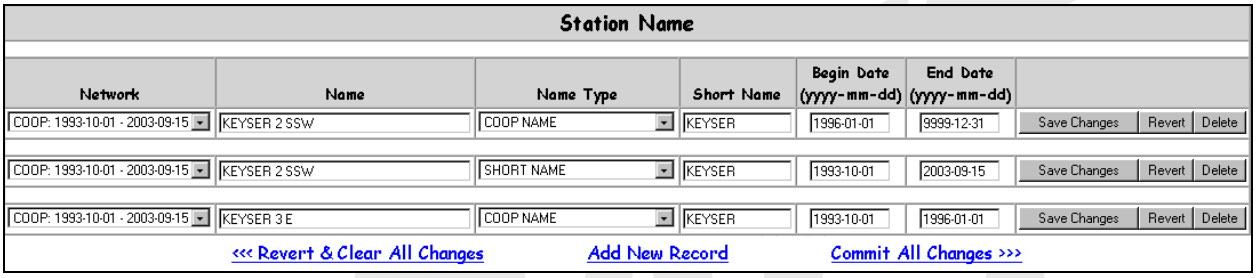
To confirm your addition(s), and any other changes, click the **Commit All Changes>>>** link at the bottom of the Update Records table. If you decide not to proceed with your change(s),

click **<<<Revert & Clear All Changes**. An **Uncommitted Changes** link in the Station Header will display as a reminder until changes are committed or reverted. Clicking this link will allow you to navigate to the uncommitted changes for action.

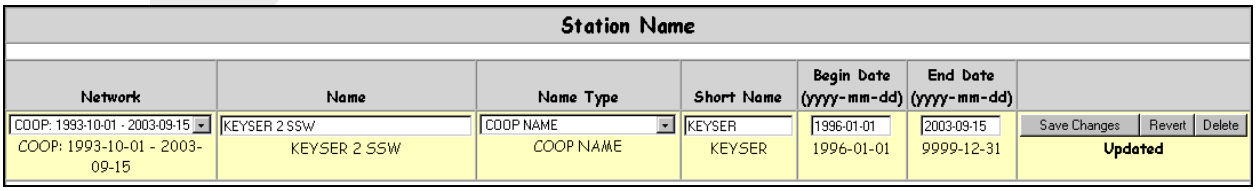
To exit Update Records mode, click an Information Tab to return to the grid view of records.

Updating Records

To update records in the database, navigate to the appropriate Update Records table. See topics above for information on edit links, locking the station, providing an information source, and displaying the Update Records table. Below is an example of the Update Records table for editing a Station Name on the Identity Tab.



Some fields, such as Network and Name Type here, limit your options to drop-down lists, but other fields are entered free-form. These fields are not case-sensitive; all text will be capitalized upon saving. Note that the date fields follow the yyyy-mm-dd format. When you have made your change(s), click the **Save Changes** button for the record you have changed. The record will become highlighted with the notation **Updated**. The original field records will appear below your new field records for comparison. These changes will not be committed to the record until you click **Commit All Changes>>>**. In the example below the End Date has been Updated.

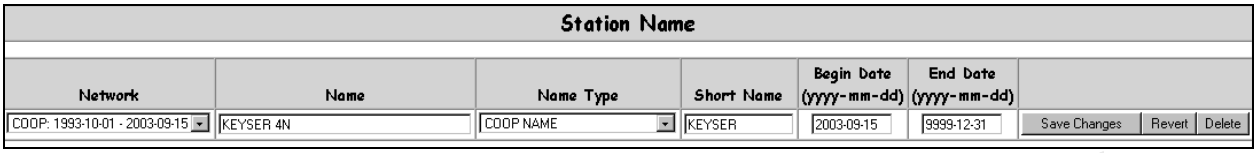


If you do not want to save your change(s), click the **Revert** button to remove your changes and return to the previous record. To confirm your change(s), click the **Commit All Changes>>>** link at the bottom of the Update Records table. If you decide not to proceed with your change(s), click **<<<Revert & Clear All Changes**. The **Uncommitted Changes** link in the Station Header will display as a reminder until the changes made are committed or reverted. Clicking this link will allow you to navigate to the uncommitted changes for action.

To exit Update Records mode, click an Information Tab to return to the grid view of records.

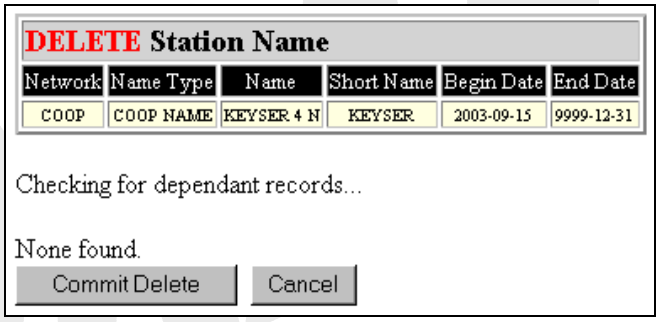
Deleting Records

To delete records from the database, navigate to the appropriate Update Records table. See topics above for information on edit links, locking the station, providing an information source, and displaying the Update Records table. Below is a Station Name record that will be deleted.

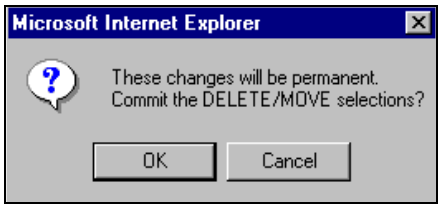


On the Update Records table, click the **Delete** button for the record to be deleted.

Since some records are linked, MI^3 will search for any records dependant on the record selected for deletion. If none are found, you will be prompted to commit the deletion by clicking the **Commit Delete** button. To cancel deleting the record, click the **Cancel** button. Below is an example of a Delete window for a record with no dependant records.



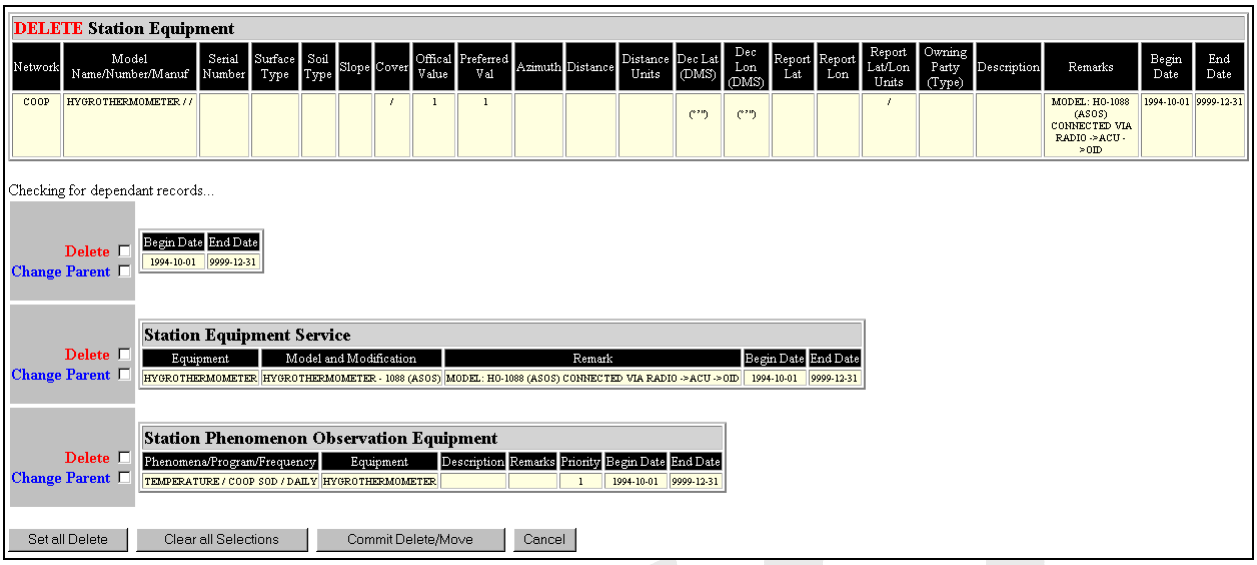
When you click the **Commit Delete** button, you will be asked once more whether to commit the deletion.



Click the **OK** button to permanently delete/move the selected record. Click the **Cancel** button to close the prompt and return to the Delete window.

After committing the deletion, the Update Records table will redisplay without the deleted record.

If MI^3 finds dependant records, you will be prompted to identify whether to delete or change the parent for the dependant records. Below is an example of a Delete window for an Equipment record with three dependant records.



DELETE Station Equipment

Network	Model Name/Number/Manuf	Serial Number	Surface Type	Soil Type	Slope	Cover	Offical Value	Preferred Val	Azimuth	Distance	Distance Units	Dec Lat (DMS)	Dec Lon (DMS)	Report Lat	Report Lon	Report Lat/Lon Units	Owning Party (Type)	Description	Remarks	Begin Date	End Date
COOP	HYGROTHERMOMETER / /					/	1	1				(°")	(°")			/			MODEL: HO-1088 (ASOS) CONNECTED VIA RADIO ->ACU ->OID	1994-10-01	9999-12-31

Checking for dependant records...

Delete ☐
Change Parent ☐

Begin Date	End Date
1994-10-01	9999-12-31

Delete ☐
Change Parent ☐

Station Equipment Service

Equipment	Model and Modification	Remark	Begin Date	End Date
HYGROTHERMOMETER	HYGROTHERMOMETER - 1088 (ASOS)	MODEL: HO-1088 (ASOS) CONNECTED VIA RADIO ->ACU ->OID	1994-10-01	9999-12-31

Delete ☐
Change Parent ☐

Station Phenomenon Observation Equipment

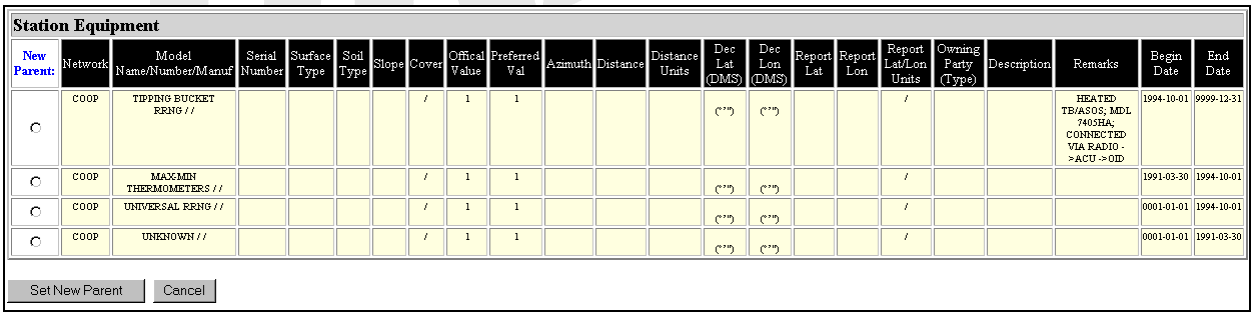
Phenomena/Program/Frequency	Equipment	Description	Remarks	Priority	Begin Date	End Date
TEMPERATURE / COOP SOD / DAILY	HYGROTHERMOMETER			1	1994-10-01	9999-12-31

Set all Delete | Clear all Selections | Commit Delete/Move | Cancel

Each dependant record is listed with the option to delete the record or change the parent for the record. To delete records, place a check mark in the **Delete** check box for each record.

To delete all records, click the **Set all Delete** button. This will place a check mark in all Delete check boxes. Click the **Clear all Selections** button to clear all check marks.

When you click a **Change Parent** check box, a New Record Selection window opens that allows you to identify the new parent. Below is an example of a New Record Selection window for the first dependant record above.



Station Equipment

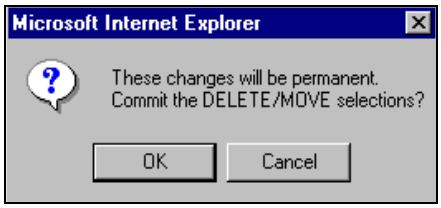
New Parent:	Network	Model Name/Number/Manuf	Serial Number	Surface Type	Soil Type	Slope	Cover	Offical Value	Preferred Val	Azimuth	Distance	Distance Units	Dec Lat (DMS)	Dec Lon (DMS)	Report Lat	Report Lon	Report Lat/Lon Units	Owning Party (Type)	Description	Remarks	Begin Date	End Date
○	COOP	TIPPING BUCKET RRNG / /					/	1	1				(°")	(°")			/			HEATED TB/ASOS; MDL 7405HA; CONNECTED VIA RADIO ->ACU ->OID	1994-10-01	9999-12-31
○	COOP	MAX-MIN THERMOMETERS / /					/	1	1				(°")	(°")			/				1991-03-30	1994-10-01
○	COOP	UNIVERSAL RRNG / /					/	1	1				(°")	(°")			/				0001-01-01	1994-10-01
○	COOP	UNKNOWN / /					/	1	1				(°")	(°")			/				0001-01-01	1991-03-30

Set New Parent | Cancel

Select the radio button for the new parent from the New Parent column. Click the **Set New Parent** button to make the change or **Cancel** to make no change. The New Record Selection window will close. If you Set New Parent, a check mark will display in the Change Parent check box for that record.

To commit your deletions and parent changes, click the **Commit Delete/Move** button. A selection to Delete or Change Parent must be made for every affected record. If a selection has not been made for one or more records, you will receive an error message. Click **OK** and complete your selections.

You will be asked once more by the prompt shown below whether to commit the deletions/changes.



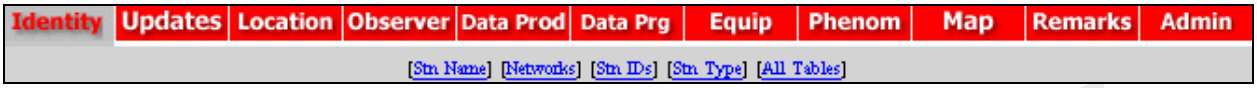
Click the **OK** button to permanently delete/move the records. Click the **Cancel** button to close the prompt and return to the Delete Record window.

After committing the deletion, the Update Records table will redisplay without the deleted record.

To exit Update Records mode, click the Information Tab to return to the grid view of records.

Information Tab Edit Links

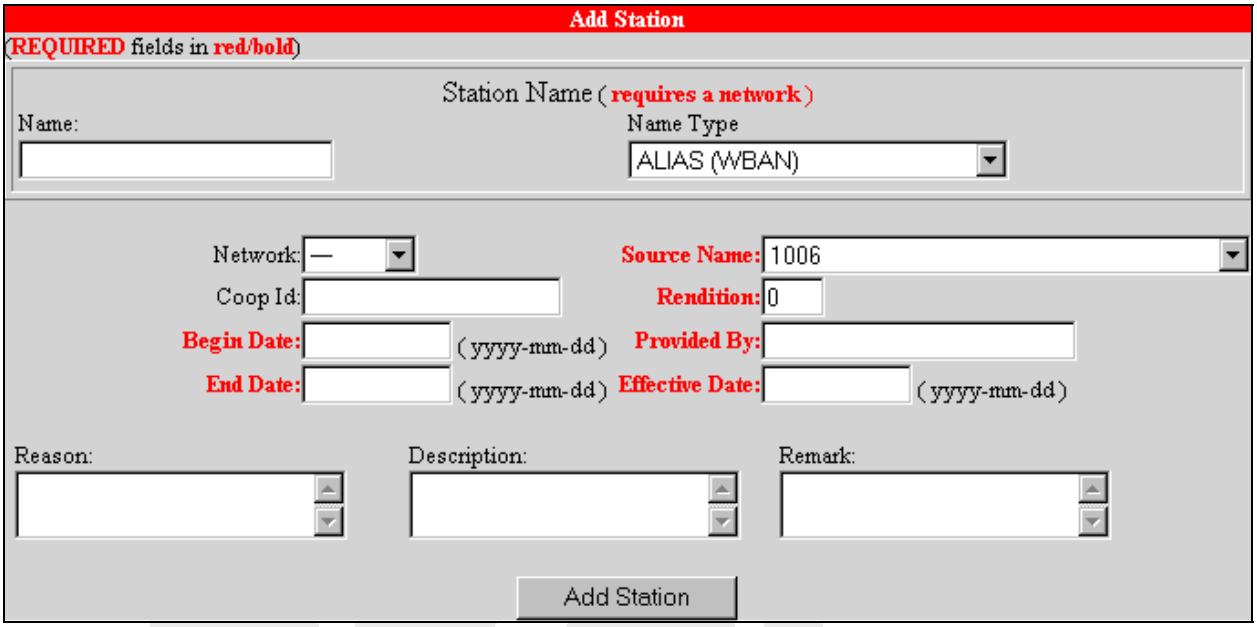
Procedures for editing information using the Information Tab Edit Links are similar to the examples shown above for updating, deleting, and adding a Station Name from the Identity Tab. Below are the Edit Links available on each of the Tabs. The **All Tables** links on the Identity, Location, Equip, and Phenom Tabs display all of the edit tables for that tab. The Map Tab does not have any Edit Links.



You do not have the option to Delete when editing the **Updates** table.

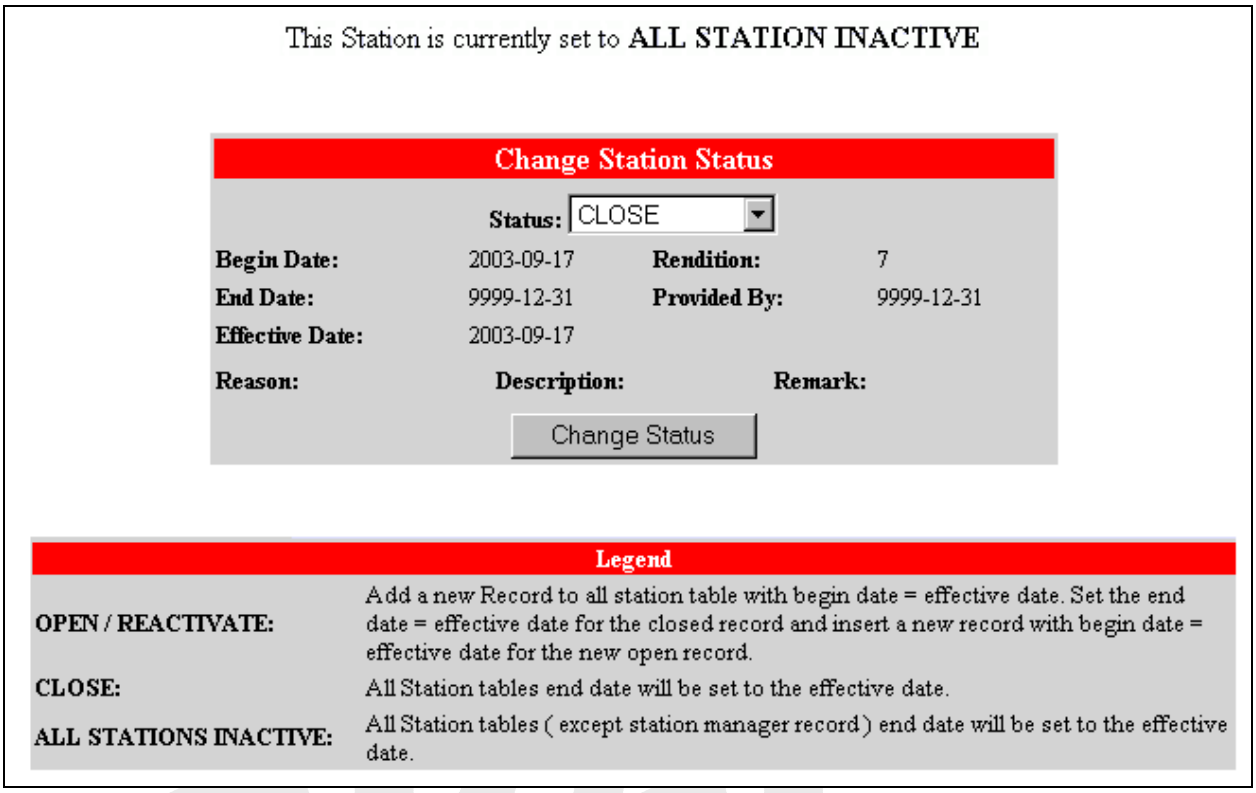
Create Station

On the Query Results header, you will find a link to **Create** a **Station**. The Add Station form shown below will open. Note that information for bold/red fields is required. Enter the appropriate station information and click the **Add Station** button.



Change Station Status

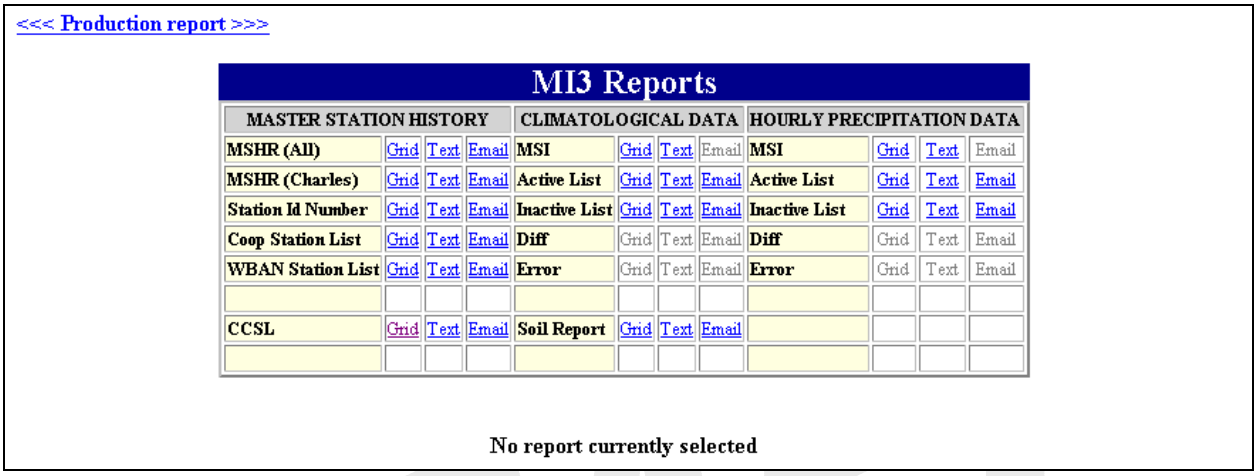
On the Admin Tab under Station Utilities, there is a link to **Change Station Status**. If a station's status is to be changed to OPEN, REACTIVATE, INACTIVE, or CLOSE click this link. The status options available in the drop-down list will be appropriate to the current status; for an INACTIVE station, only CLOSE and REACTIVATE will be available. If the station is not locked, you will receive a prompt that the station is being locked and you will be prompted to accept/cancel, end, or modify your Info Source.



Select a Status from the drop-down list and click the **Change Status** button. The Legend provided explains each Status.

Reports

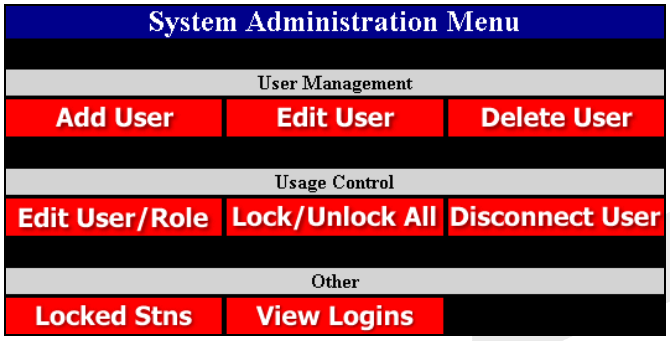
From the Initial Query or Query Results header (see *Initial Query* and *Query Results* above), click the **Reports** link. The list of MI^3 Reports shown below is displayed along with a link to Production Reports.



<<TO BE DEVELOPED FURTHER>>

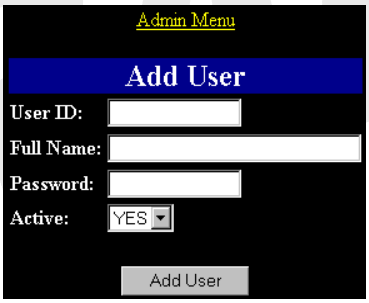
System Administration

The System Administration section is used by System Administrators to manage MI[3] users and sessions. If you have been assigned System Administration roles, click the **Sys Admin** link on either the Initial Query or the Query Results header (see *Initial Query* and *Query Results* above).



Add User

To add a new user, click **Add User** and complete the required information shown below.



Click the **Add User** button when completed. MI[3] will confirm the user has been created. Click **OK** to return to the Administration Menu. Click **Edit User/Role** (see topic below) to assign MI[3] roles to the new user. The **Admin Menu** link returns you to the Administration Menu without saving the user.

Edit User

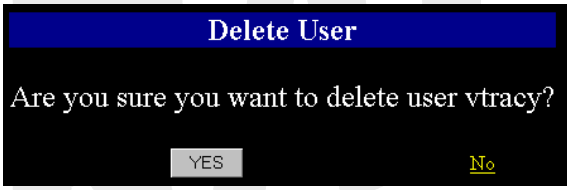
The Edit User feature on the Administration Menu allows you to update a user's profile, including name, password, and active/inactive status. Click the **Edit User** button to open the following prompt.

Select the user you want to edit from the drop-down list. Click the **Edit User** button.

The Edit User form shown above opens. Update fields as necessary. Click the **Edit User** button when completed. MI[3] will confirm the user has been updated. Click **OK** to return to the Administration Menu.

Delete User

To delete a user from the system, click **Delete User** on the Administration Menu. Select the user to be deleted from the drop-down list provided. Click the **Delete User** button. You will be asked to confirm deletion of this user.



Click **No** to return to the Administration Menu with no action taken. Click **Yes** to delete the user. MI[3] will confirm user deletion. Click **OK** to return to the Administration Menu.

Edit User/Role

A user's access to view, add, update, and delete data in MI[3] is governed by the roles assigned to the user. To assign or modify a user's MI[3] roles, click **Edit User/Role** on the Administration Menu.

From the window shown above, select the user to be modified and click the **Edit User** button. The list of User Roles shown below opens.

Place a check mark next to each of the roles the user will be assigned. If a user has no roles assigned for a particular subject area, links to that area will not be available for the user. When completed, click the **Save** button. MI[3] will confirm roles have been updated; click **OK** to return to the Administration Menu. Click the **Cancel** button to exit Edit User Roles without saving any role assignments.

Lock/Unlock All

In the event all stations must be locked for system-wide maintenance, click **Lock/Unlock All** on the Administration Menu. The current status, whether up for normal use or down for maintenance, will be displayed.

To lock all stations, click the **Lock for Maintenance** button. Click the **Admin Menu** link to return to the Administration Menu.

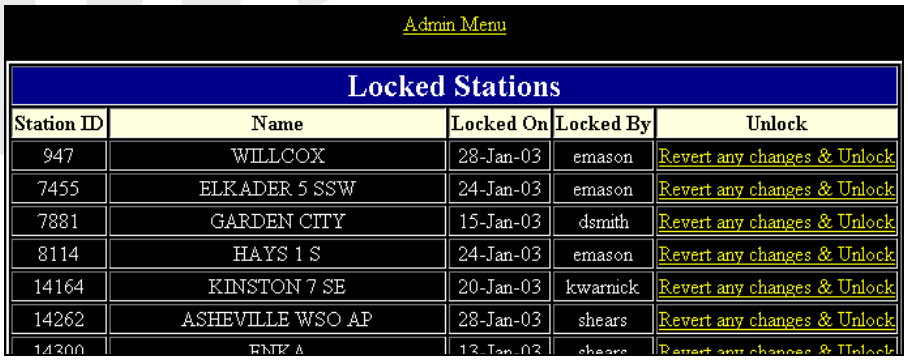
When maintenance is complete, return here and click the **Unlock System** button. Click the **Admin Menu** link to return to the Administration Menu.

Disconnect User

To disconnect a user or all users, forcing the user(s) to log in, click **Disconnect User** on the Administration Menu and select the user(s) to disconnect. Click the **Force Logins** button. The system will confirm the user(s) was booted. Click **OK** to return to the Administration Menu. The user(s) will receive a message that the user(s) was disconnected by a System Administrator and will be redirected to the Login screen.

Locked Stations

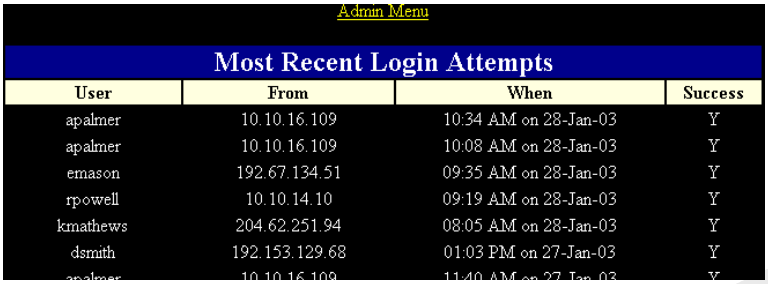
A list of all locked stations can by viewed by clicking **Locked Stns**.



In addition to viewing the list, you may also elect to **Revert any changes & Unlock** a station. Click the **Admin Menu** link to return to the Administration Menu.

View Logins

To view a list of logins, click **View Logins** on the Administration Menu.



You can see the user name, where the user has logged in from, when the user logged in, and whether the login was successful or not. Click the **Admin Menu** link to return to the Administration Menu.

To exit System Administration, close the window by using your Web browser's File > Close command or clicking the **x** in the upper right hand corner of the window.

Exiting MI3

To exit MI[3], close all open MI[3] windows, either by using your Web browser's File > Close command or clicking the **x** in the upper right hand corner of the windows. You are not required to log out.

Appendix A – List of Station Data by Information Tab

Below is a list of the information found on each of the Station Information Tabs.

Identity
- Station Identifiers (COOP ID, WBAN, Call Sign, etc.)
- Station Name(s)
- Station Type

Updates
- Description of Updates
- Source of Updates
- Update Entry Date

Location
- Climate Division
- County
- Elevation
- Latitude/Longitude
- Location Description
- Relocation Information
- Time Zone
- Topographic Details

Observer
- Observer Names
- Observer Roles
- Station Manager

Data Prod
- Data Products Produced
- Observation Frequency
- Observation Times
- Phenomena Observed

Data Prg
- Observation Frequency
- Participating Data Programs
- Phenomena Observed

Equip
- Elevation of Equipment
- Equipment Name
- Equipment Type/Model/Serial Number
- Participating Data Programs
- Phenomena Observed
- Priority

Phenom
- Equipment Model/Name
- Observation Frequency
- Observation Times

Phenomena Observed
Reporting Method
Period of Record

Map

Map of Station Location

Remarks

Additional Station Information
Author and Date of Modifications to Remarks
Author of Remark
Context of Remark
Date Remark Entered

Admin

Agents Responsible for Administering Station
Change Station Status
Uncategorized Additional Station Information (Attributes)

Appendix B – Alphabetical List of Station Data

Below is a list of features and the Station Information Tab(s) where the feature is located.

Feature	Tab
Additional Station Information	Remarks
Agents Responsible for Administering Station	Admin
Change Station Status	Admin
Climate Division of Station	Location
County of Station	Location
Data Products Produced	Data Prod
Elevation of Station	Location
Elevation of Equipment	Equip
Equipment Name	Phenom, Equip
Equipment Type/Model/Serial Number	Equip
Latitude/Longitude of Station	Location
Location Description	Location
Map of Station Location	Map
Observation Frequency	Phenom, Data Prg, Data Prod
Observation Times	Phenom, Data Prod
Observer Names	Observer
Observer Roles	Observer
Obstructions	Phenom
Participating Data Programs	Equip, Data Prg
Period of Record	Phenom
Phenomena Observed	Phenom, Equip, Data Prg, Data Prod
Relocation Information	Location
Reporting Method	Phenom
Station Identifiers	Identity
Station Manager	Admin
Station Name(s)	Identity
Station Type	Identity
Time Zone of Station	Location
Topographic Details of Station Location	Location
Uncategorized Additional Station Information	Admin
Updates Record	Updates

Appendix C – Sample Scenarios

When working within the application, please remember that it is extremely importantly to populate the fields marked in **RED**. Also of extreme importance is to COMMIT ALL RECORDS before proceeding to the next subtab.

Scenario 1 – Reactivate a station

Station 36-2323 Dushore, PA

Rendition 6 submitted to 07. REACTIVATE AN INACTIVE STATION, report station move 0.4 miles SW, add SRG, MMTS, and ROSA.

What are the steps required to Reactivate the station?

- Enter new Rendition number
- Report station move of 0.4 miles SW
- Change Latitude and Longitude; lat/lon source
- Add end date to previous Location Description
- Change Observer
- Change backup Observer
- Start Temperature and Precipitation in CD publication
- Add SRG with Equipment Description, Ob Time, Reporting Method, Recipient
- Add MMTS with Serial Number, Equipment Description, Ob Time, Reporting Method, Recipient; Add Snowstake with Equipment Description, Ob Time, Reporting Method, Recipient
- Add Encoder with Equipment Description
- Add Telx with Equipment Description
- Enter Azimuth distance of these pieces of equipment: F&P, MMTS, SNOWSTAKE, ENCODER
- Enter Obstructions
- Enter Reason for Report
- Enter Remarks
- Enter Effective Date

How is it done in MI^3?

- Locate the desired station by searching on either **COOP ID** or **NAME**. If using a COOP ID, make sure you remove the '-'.
- Select from the ADMIN tab **STATION UTILITIES**, then **CHANGE STATION STATUS**
- Acquire a lock on the station by selecting **OK**

At this point the source document will pop-up containing Source information which you will need to fill out.

- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #** as **6**
- Select **PROVIDED BY – NWS**

- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **07. REACTIVATE AN INACTIVE STATION**
- Enter *REMARKS* from the B44 into the **REMARKS** field
- Select **SAVE**

At this point you are back on the Change Current Status page:

- Choose **REACTIVATE** from the **CHANGE STATION STATUS** drop-down box
- Select **CHANGE STATUS**

Next go to the LOCATION tab

- Choose the LOCATION subtab and using the current record update the **REPORT LAT** and **REPORT LON** to the correct values and if necessary change the **REPORT LAN/LON UNITS**
- Select **SAVE**
- Click **COMMIT ALL CHANGES**

- Choose the DESCRIPTION subtab and find the current record. This record which is a duplicate of the previous record MAY be wrong and may not need to be there. If it's not needed then choose **DELETE**. Otherwise, update it with the correct values.
- Select **SAVE**
- Click **COMMIT ALL CHANGES**

- Choose the RELOCATION subtab
- Choose "ADD A NEW RECORD" and add the move of 0.4 to **DISTANCE FROM PREVIOUS**
- Select "MILES" from the **UNITS**
- Add SW to the **RELOC DIRECTION**
- Select the correct record with time period from the **LOCATION LAT/LON** drop down box. In this case that is the most recent record.
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Choose the OBSTRUCTIONS subtab and using the current record update the fields to the correct values If a current OBSTRUCTION record does not exist, choose "ADD A NEW RECORD" and populate the record with all known values.
- Select **SAVE**
- Repeat for all obstructions
- Click **COMMIT ALL CHANGES**

Next go to the Observer tab

- Verify that the current values are still correct. If not then choose the INVOLVED PARTIES subtab and select the current record. Click on the **PARTY(TYPE)** field and the Change Station Party window will popup.

- Select a name from the list or search for the observer needed. If they don't exist then choose "Add New" and add the record. After completing the observer selection choose SELECT and that value will be populated in the **PARTY(TYPE)** field.
- select the **ROLE** this observer plays. If the observer name entered is a person but the observer type is an Institution or Government then the Institution or Governemtn Name must be entered into the Observer Short Name field for publication purposes
- Select **SAVE**
- If another role needs to be added(such as a backup observer) and one does not exist for the current record, select "ADD A NEW RECORD" and follow the same procedure as above in choosing a **PARTY(TYPE)**, **ROLE** and **NETWORK**
- Click **ADD RECORD**
- After adding all relevant observers, click **COMMIT ALL CHANGES**

Next go to the Data Prod tab

- Verify that the current records are correct. Should be reporting both the CD and HPD data products with the current **END DATE**

Next go to the Data Prg tab

- Verify that the current records are still correct and that there is a record with COOP SOD and COOP HPD and the current **END DATE**

Next go to the Equipment tab

- Choose the EQUIPMENT subtab
- Verify that the Pieces of equipment with the current end date of 12/31/9999 are still valid. If not, change the end dates or delete them if necessary.
- Select "ADD A NEW RECORD" and populate all reported data for the piece of equipment that needs to be added including the **MODEL NAME/NUMBER/MANUF** field which is where you choose the piece of equipment to add. Most importantly make sure you populate the fields marked in **RED**. These would be the **NETWORK** where you would select the record with the current end date of 12/31/9999 and also **BEGIN DATE** and **END DATE** which are pre-populated with the begin and end dates used in your information source.
- Click **ADD RECORD**
- Next, Add the next piece of equipment the same way and continue until all pieces of equipment are added.
- After all pieces of equipment have been added Click **COMMIT ALL CHANGES**

Next go to the Phenom tab

- Choose the PHENOMENON subtab and verify that PRECIPITATION and TEMPERATURE are present with the current **END DATE**. If not, select "ADD A NEW RECORD" and create both of them.
- After both have been added Click **COMMIT ALL CHANGES**

- Choose the PROTOCOL subtab and verify that PRECIPITATION and TEMPERATURE are present with the current **END DATES** and correct **DATA**

PROGRAM of COOP SOD. If not, select "ADD A NEW RECORD" and create them with all known values

- After all records have been added or changed Click **COMMIT ALL CHANGES**

- Choose the SCHEDULE subtab and verify that PRECIPITATION and TEMPERATURE are present with the current **END DATES** and correct **DATA PROGRAM** of COOP SOD. Also make sure that the **OBSERVATION TIME** is correct. If no current record exists, then select "ADD A NEW RECORD" and create them with all known values.
- Click **ADD RECORD** or **SAVE**
- Repeat the above steps until all observation times have been added for each phenomenon record.
- Click **COMMIT ALL CHANGES**

- Select the EQUIPMENT subtab and verify that the current records are correct for each data program and piece of equipment. If they are not then delete the incorrect record.
- Select "ADD A NEW RECORD" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the current record for the PRECIPITATION phenomenon and COOP SOD data program.
- Select the corresponding **EQUIPMENT** record that you added previously. In this case it would be the SRG with the current end date.
- Add the **PRIORITY** value for the record, which would be 1 for primary.
- Click **ADD RECORD**
- Select "ADD A NEW RECORD" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the current record for the TEMPERATURE phenomenon and COOP SOD data program.
- Select the corresponding **EQUIPMENT** record that you added previously. In this case it would be the MMTS with the current end date.
- Add the **PRIORITY** value for the record, which would be 1 for primary.
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Select the DATA PRODUCTS subtab and verify that the current Data Product records are still correct. If not then delete the record
- Select "ADD A NEW RECORD" and select the current record from **PHENOMENA/PROGRAM/FREQUENCY** and the current record from **DATA PRODUCT**
- Click **ADD RECORD**
- Repeat for each Data product
- Click **COMMIT ALL CHANGES**

- Select the RPT METHOD subtab and verify that the current Data Product records are still correct. If not then delete the record

- Select "ADD A NEW RECORD" and select the current record from **PHENOMENA/PROGRAM/FREQUENCY** and the correct value from **REPORTING METHOD**
- Click **ADD RECORD**
- Repeat for each Reporting Method
- Click **COMMIT ALL CHANGES**

- Select the REC PARTY subtab and verify that the current Recipient records are still correct. If not then delete the record
- Select "ADD A NEW RECORD" and select the current record from **OBSERVATION REPORTING METHOD** and click the **PARTY(TYPE)** field. From this popup window select the correct recipient and choose SELECT
- Click **ADD RECORD**
- Repeat for each Receiving Party
- Click **COMMIT ALL CHANGES**

- Select the PERIOD OF RECORD subtab and verify that the current Period of Record records are still correct. If not then modify the end date or delete if necessary

Next got to the Admin tab

- Click on ADMINISTRATION and verify that the current records are still correct. If not then modify the end date or delete them

Finally

- Review and **COMMIT** any missed changes by selecting items via the **UNCOMMITTED CHANGES** link in the header. If none were missed this link will not be visible.
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header

Scenario 2 – Inactivate a station

Station 41-0202 Alvarado 2 NNW, TX
Rendition 13 submitted to 06. INACTIVATE A STATION

What are the steps required to Inactivate the station?

- Enter new Rendition number
- Enter Reason for Report
- Enter Remarks
- Enter Effective Date

How is it done in MI^3?

- Locate the desired station by searching on either **COOP ID** or **NAME**
- Select from the ADMIN tab **STATION UTILITIES**, then **CHANGE STATION STATUS**
- Acquire a lock on the station by selecting **OK**

At this point the source document will pop-up containing Source information which you will need to fill out.

- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #** as **13**
- Select **PROVIDED BY – NWS**
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **06. INACTIVATE STATION**
- Enter *REMARKS* from the B44 into the **REMARKS** field
- Select **SAVE**

At this point you are back on the Change Current Status page:

- Choose **INACTIVATE** from the **CHANGE STATION STATUS** drop-down box
- Select **CHANGE STATUS**

Finally

- Review all Primary tabs to ensure records were properly closed
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header

Scenario 3 – Close a station

Station 41-4703 Katy, TX

Rendition 5 submitted to 02. CLOSE A STATION

What are the steps required to Close the station?

- Enter new Rendition number
- Enter Reason for Report
- Enter Effective Date

How is it done in MI³?

- Locate the desired station by searching on either **COOP ID** or **NAME**
- Select from the ADMIN tab **STATION UTILITIES**, then **CHANGE STATION STATUS**
- Acquire a lock on the station by selecting **OK**

At this point the source document will pop-up containing Source information which you will need to fill out.

- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #** as **5**
- Select **PROVIDED BY – NWS**
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **02. CLOSE A STATION**
- Enter *REMARKS* from the B44 into the **REMARKS** field
- Select **SAVE**

At this point you are back on the Change Current Status page:

- Choose **CLOSE** from the **CHANGE STATION STATUS** drop-down box
- Select **CHANGE STATUS**

Finally

- Review all Primary tabs to ensure records were properly closed
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header

Scenario 4 – Relocate a station

Station 35-2597 Elgin, OR

Rendition 16 submitted to 04. RELOCATE A STATION (COMPATIBLE)

What are the steps required to Relocate the station?

- Enter new Rendition number
- Enter move of 0.2 miles SE
- Change Latitude and Longitude, lat/lon source
- Enter end date to previous Location Description
- Change Ob Time for both Precipitation and Temperature
- Change Azimuth/Distance for MMTS
- Add Equipment of both Snowboard and Snowstick
- Add Azimuth/Distance of both Snowboard and Snowstick
- Change Obstructions
- Enter Reason for Report
- Enter Remarks
- Enter Effective Date

How is it done in MI^3?

- Locate the desired station by searching on either **COOP ID** or **NAME**. If using a COOP ID, make sure you remove the '-'.

Choose the LOCATION tab and select **UPDATE RECORDS**

- Acquire a lock on the station by selecting **OK**

At this point the source document will pop-up containing Source information which you will need to fill out.

- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #** as **16**
- Select **PROVIDED BY – NWS**
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **04. RELOCATE A STATION (COMPATIBLE)**
- Enter *REMARKS* from the B44 into the **REMARKS** field
- Select **SAVE**

- Choose the LOCATION subtab and using the current record update the **END DATE** to the effective date of the B44
- Choose "ADD A NEW RECORD" and fill in all known values. Most can be copied from the previous record. Update the **REPORT LAT** and **REPORT LON** to the correct values and the **REPORT LAN/LON UNITS**.
- Most importantly make sure you populate the fields marked in **RED**. That would be **LOCATION TYPE** which will be "FIXED", **NETWORK**, which will be the current

record in the drop down list and the **BEGIN DATE** and **END DATE** which will be pre-populated
- Select **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Choose the DESCRIPTION subtab and find the current record.
- Select **DELETE**
- Click **COMMIT ALL CHANGES**

- Choose the RELOCATION subtab
- Select the current record if there is one and update the move of 0.2 to **DISTANCE FROM PREVIOUS**
- Select "MILES" from the **UNITS**
- Add SE to the **RELOC DIRECTION**
- Select the correct record with time period from the **LOCATION LAT/LON** drop down box. In this case that is the most recent record.
- Select **SAVE**
- If the record doesn't exist Choose "ADD A NEW RECORD" and add the above information
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Choose the OBSTRUCTION subtab
- Identify the current records for the obstructions and update all known fields
- Select **SAVE**
- If a current record does not exist, choose "ADD A NEW RECORD" and populate all known data about the obstruction. This includes the **ELEVATION UNITS, ELEV ANGLE, AZIMUTH, DISTANCE, DESCRIPTION** and others. Most importantly make sure you populate the fields marked in **RED**. This includes the **OBSTRUCTION TYPE** and **LOCATION LAT/LON** which is the current Location record
- Click **ADD RECORD**
- Repeat for additional Obstructions
- Click **COMMIT ALL CHANGES**

Next go to the Equipment tab
- Choose the EQUIPMENT subtab
- Identify the current record for MMTS and update the **AZIMUTH** and **DISTANCE**
- Select **SAVE**
- Select "ADD A NEW RECORD" and populate all reported data for the SNOWBOARD including the **AZIMUTH** and **DISTANCE**. Most importantly make sure you populate the fields marked in **RED**. These would be the **NETWORK** where you would select the record with the current end date of 12/31/9999 and also **BEGIN DATE** and **END DATE** which are pre-populated with the begin and end dates used in your information source.

- Click **ADD RECORD**
- Select "ADD A NEW RECORD" and populate all reported data for the SNOWSTICK including the **AZIMUTH** and **DISTANCE**. Most importantly make sure you populate the fields marked in **RED**. These would be the **NETWORK** where you would select the record with the current end date of 12/31/9999 and also **BEGIN DATE** and **END DATE** which are pre-populated with the begin and end dates used in your information source.
- Click **ADD RECORD**
- After all pieces of equipment have been added Click **COMMIT ALL CHANGES**

Next go to the Phenom tab

- Select the SCHEDULE subtab
- Choose the current Observation record for Precipitation and update the **END DATE** to the effective date of the B44
- Select **SAVE**
- Choose the current Observation record for Temperature and update the **END DATE** to the effective date of the B44
- Select **SAVE**
- Select "ADD A NEW RECORD" and select from the **PHENOMENA/PROGRAM/FREQUENCY** drop down list the current record for Precipitation and add the new value for **OBSERVATION TIME**.
- Click **ADD RECORD**
- Select "ADD A NEW RECORD" and select from the **PHENOMENA/PROGRAM/FREQUENCY** drop down list the current record for Temperature and add the new value for **OBSERVATION TIME**.
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Select the EQUIPMENT subtab and verify the current records are correct.
- Select "ADD A NEW RECORD" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the record corresponding to the current record for Precipitation
- Select the corresponding **EQUIPMENT** record that you added previously. In this case it would be the SNOWBOARD with the current end date.
- Add the **PRIORITY** value for the record, which would be 1 for primary.
- Click **ADD RECORD**
- Select "ADD A NEW RECORD" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the record corresponding to the current record for Precipitation
- Select the corresponding **EQUIPMENT** record that you added previously. In this case it would be the SNOWSTICK with the current end date.
- Add the **PRIORITY** value for the record, which would be 1 for primary.
- Click **ADD RECORD**
- After all pieces of equipment have been added Click **COMMIT ALL CHANGES**

- Select the DATA PRODUCT subtab and verify that the current Data Product records are still correct. If not then modify the end date or delete where necessary
- If needed Add records for DATA PRODUCT for the SNOWBOARD and SNOWSTICK if they are to be reported. If not, then do nothing here
- After all data product records have been added Click **COMMIT ALL CHANGES**

- Select the RPT METHOD subtab and verify current records. If needed Select "ADD A NEW RECORD" and add records for the SNOWBOARD and SNOWSTICK
- After all reporting methods have been added Click **COMMIT ALL CHANGES**

- Select the REC PARTY subtab and verify current records. If needed Select "ADD A NEW RECORD" and add records for the SNOWBOARD and SNOWSTICK
- After all receiving parties have been added Click **COMMIT ALL CHANGES**

Finally

- Review and **COMMIT** any missed changes by selecting items via the **UNCOMMITTED CHANGES** link in the header. If none were missed this link will not be visible.
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header

Scenario 5 – Establish a station

Station 40-4568 Jackson 4 NE, TN
Rendition 1 submitted to 01. ESTABLISH A STATION

What are the steps required to Establish the station?

- Brand new station
- Enter Rendition number
- Station coop, primary and short name
- Station Number
- Climate Division
- Station ID (NWSLI)
- Latitude and Longitude, lat/lon source
- County
- State
- Elevation CPA Region
- Time Zone
- Coop Network
- Station Manager
- Reason for Report
- Effective Date
- Topography
- Remarks
- Observer (Primary)
- Observer (Backup)
- Publication of Daily Precipitation
- Precipitation Equipment of SRG with equipment description, Ob Time, Reporting Method and Recipient
- Obstructions

How is it done in MI^3?

- From the MI^3 opening page choose **CREATE STATION**
- Enter the following information into the fields of the table labeled ADD STATION: (all information can be found on B44)
- Name of the station
- Name type- from the drop down you will choose **COOP NAME**
- Network
- Coop id
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter an end date of 9999/12/31
- Add the **SOURCE** for the document from the drop down box –B44
- Enter current rendition # as 1
- Enter the **REASON as 01**. **ESTABLISH A STATION**

- Enter *REMARKS* from the B44 into the **REMARKS** field
- When finished, select **ADD STATION**

At this point a table will pop up that is labeled STATION JACKSON 4 NE CREATED. This table is verifying the information that you had entered into the add station table.

- Select **CONTINUE EDITING THIS STATION**

At this point you should now be at the STATION INFORMATION TABS page.

- Select from the **IDENTITY** tab STN **NAME**.
- Acquire a lock on the station by selecting **OK**
- An infosource for this current session will pop up select **MODIFY**.

You will now have reached a table called UPDATE INFO SOURCE FOR CURRENT SESSION.

- Enter from the drop down **SOURCE** field B44 -- B44 COOP FORM

All the information that needs to be entered into this table should have populated over from the CREATE A STATION table, except REMARKS.

- Enter *REMARKS* from the B44 into the **REMARKS** field.
- Select **SAVE**

At this point you are back on the **IDENTITY** tab under **STN NAME** subtab

- Enter short name into the table already provided
- Select **SAVE**
- Choose "**ADD NEW RECORD**" and add short name
- Select current network
- Add short name to **NAME** field
- Select **SHORT NAME** from the NAME **TYPE** drop down box and add short name again to the **SHORT NAME** field.

Choose the **NETWORKS** subtab

- Verify that the network has populated properly from the CREATE A STATION table.

Choose the **STN Ids** subtab

- Choose "**ADD NEW RECORD**" and add the NWSLI.
- Choose **NWSLI** under **ID TYPE**
- Add **STATION ID** to the **ID** field
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Choose the **STN TYPE** subtab

- Choose "**ADD NEW RECORD**" and add the station type.
- Choose coop from the **STATION TYPE** drop down box
- Choose the current network under **NETWORK** drop down box
- Choose **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Next go to the **LOCATION TAB**
Choose the **LOCATION** subtab

- Choose "ADD **A NEW RECORD**" and fill in all known values.
- Most importantly make sure you populate the fields marked in **RED**. That would be **LOCATION TYPE** which will be "FIXED", **NETWORK**, which will be the current record in the drop down list and the **BEGIN DATE** and **END DATE** which will be pre-populated
- Select **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Choose the **ELEVATION** subtab

- Select "**ADD NEW RECORD**" and add the station elevation, **REFERENCE POINT, EQUIP/POSITIONING METHOD, REPORT ELEVATION, REPORT FEET, MEASUREMENT DATE, DATUM, ELEVATION UNITS** and select the current **NETWORK**
- Select **SAVE**
- Click **COMMIT ALL CHANGES**

- Choose the **TOPOGRAPHY** subtab
- Identify the current **LOCATION LAT/LON** by selecting from drop down box
- Enter description of topography provided on B44.
- Select **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Choose the **OBSTRUCTION** subtab

- Select "**ADD A NEW RECORD**" and populate all known data about the obstruction. This includes the **ELEVATION UNITS, ELEV ANGLE, AZIMUTH, DISTANCE, DESCRIPTION** and others. Most importantly make sure you populate the fields marked in **RED**. This includes the **OBSTRUCTION TYPE** and **LOCATION LAT/LON** which is the current Location record
- Click **ADD RECORD**
- Repeat for additional Obstructions
- Click **COMMIT ALL CHANGES**

Choose the **REGION** subtab

- Choose "**ADD NEW RECORD**" and add the station region.
- Choose the current **LOCATION LAT/LON** by selecting from drop down box
- Select the station region from the **REGION** drop down box

- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Choose the **CLIMATE DIV** subtab

- Choose "**ADD NEW RECORD**" and add the station climate division.
- Choose the current **LOCATION LAT/LON** by selecting from drop down box
- Select the station climate division from the **CLIMATE DIVISION** drop down box
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Next go to the **OBSERVER** tab
Choose the **INVOLVED PARTIES** subtab

- Click on the **PARTY(TYPE)** field and the Change Station Party window will popup.
- Select a name from the list or search for the observer needed. If they don't exist then choose "Add New" and add the record. After completing the observer selection choose **SELECT** and that value will be populated in the **PARTY(TYPE)** field.
- select the **ROLE** this observer plays
- Select **SAVE**
- If another role needs to be added(such as a backup observer) and one does not exist for the current record, select "**ADD A NEW RECORD**" and follow the same procedure as above in choosing a **PARTY(TYPE)**, **ROLE** and **NETWORK**
- Click **ADD RECORD**
- After adding all relevant observers, click **COMMIT ALL CHANGES**

Next go to the **DATA PROD** tab
Choose **STN DATA PRODUCTS** subtab

- Choose "**ADD NEW RECORD**"
- Choose the current network under **NETWORK** drop down box
- Select the **DATA PRODUCT** from the drop down box that corresponds with the station publication
- Click **ADD RECORD**
- Repeat steps if more than one data product exists.
- Choose **COMMIT ALL CHANGES** once all information has been entered.

Next go to the **DATA PRG** tab

- Choose **STN DATA PROGRAMS** subtab
- Choose "**ADD NEW RECORD**"
- Choose the current network under **NETWORK** drop down box
- Select the **DATA PROGRAM** from the drop down box that corresponds with the station publication
- Click **ADD RECORD**
- Repeat steps if more than one data product exists.
- Choose **COMMIT ALL CHANGES** once all information has been entered.

Next go to the **EQUIP** tab
Choose the **EQUIPMENT** subtab

- Select "**ADD A NEW RECORD**" and populate all reported data for the piece of equipment that needs to be added including the **MODEL NAME/NUMBER/MANUF** field which is where you choose the piece of equipment to add. Most importantly make sure you populate the fields marked in **RED**. These would be the **NETWORK** where you would select the record with the current end date of 12/31/9999 and also **BEGIN DATE** and **END DATE** which are pre-populated with the begin and end dates used in your information source.
- Click **ADD RECORD**
- Next, add the next piece of equipment the same way and continue until all pieces of equipment are added.
- After all pieces of equipment have been added Click **COMMIT ALL CHANGES**

Next go to the **PHENOM** tab

- Choose the PHENOMENON subtab
- Select "**ADD A NEW RECORD**".
- Choose the current network under **NETWORK** drop down box
- Click the **PHENOMENON** and choose the phenomenon that corresponds with station.
- After all phenomenon for station has been added Click **COMMIT ALL CHANGES**

Choose the **PROTOCOL** subtab

- Select "**ADD A NEW RECORD**" and create protocol with all known values
- Choose from drop down boxes the station phenomenon and data program that corresponds with the station.
- Select from the **FREQUENCY** drop down the equipment frequency.
- Select **ADD RECORD**
- After all records have been added or changed Click **COMMIT ALL CHANGES**

Choose the **SCHEDULE** subtab

- Select "**ADD A NEW RECORD**" and create them with all known values.
- **PHENOMENA/PROGRAM/FREQUENCY** field select the current record for the phenomenon, data program, and frequency.
- Enter observation time which corresponds with correct **PHENOMENA/PROGRAM/FREQUENCY** field.
- Click **ADD RECORD** or **SAVE**
- Repeat the above steps until all observation times have been added for each phenomenon record.
- Click **COMMIT ALL CHANGES**

Select the **EQUIPMENT** subtab

- Select "ADD A NEW RECORD"

- In the **PHENOMENA/PROGRAM/FREQUENCY** field select the current record for the phenomenon and data program.
- Select the corresponding **EQUIPMENT** record that you added previously.
- Add the **PRIORITY** value for the record, which would be 1 for primary.
- Repeat the above steps until all equipment has been added.
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Select the **DATA PRODUCTS** subtab

- Select "**ADD A NEW RECORD**" and select the current record from **PHENOMENA/PROGRAM/FREQUENCY** and the current record from **DATA PRODUCT**
- Click **ADD RECORD**
- Repeat for each Data product
- Click **COMMIT ALL CHANGES**

Select the **RPT METHOD** subtab

- Select "**ADD A NEW RECORD**" and select the current record from **PHENOMENA/PROGRAM/FREQUENCY** and the correct value from **REPORTING METHOD**
- Click **ADD RECORD**
- Repeat for each Reporting Method
- Click **COMMIT ALL CHANGES**

Select the **REC PARTY** subtab

- Select "ADD **A NEW RECORD**" and select the current record from **OBSERVATION REPORTING METHOD** and click the **PARTY(TYPE)** field. From this popup window select the correct recipient and choose SELECT
- Click **ADD RECORD**
- Repeat for each Receiving Party
- Click **COMMIT ALL CHANGES**

Select the PERIOD OF RECORD subtab and verify that the current Period of Record records are still correct. If not then modify the end date or delete if necessary

Next got to the **ADMIN** tab
Click on **ADMINISTRATION** and verify that the current records are still correct. If not then modify the end date or delete them

Finally

- Review and **COMMIT** any missed changes by selecting items via the **UNCOMMITTED CHANGES** link in the header. If none were missed this link will not be visible.
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header

Scenario 6 – Re-establish a station (compatible)

Station 50-2711 Eielson Visitor Center, AK

Rendition 4 submitted to 03. REESTABLISH A STATION (COMPATIBLE)

What are the steps required to Re-establish the station

- Enter Rendition number
- Change Latitude and Longitude, lat/lon source
- Enter Station ID (NWSLI)
- Enter County
- Change Elevation
- Enter COOP Network
- Enter Station Manager
- Enter Time Zone
- Enter Reason for Report
- Enter Remarks
- Enter Effective Date
- Enter Observer
- Enter Temperature and Precipitation published in CD
- Enter Equipment SRG with Ob Time, Reporting Method, Recipient
- Enter Equipment MXMN with Ob Time, Reporting Method, Recipient
- Enter TEMPS with equipment description
- Enter CRS, which houses the MXMN Thermometers
- Enter Azimuth/Distance of CRS with MXMN
- Enter Obstructions

How is it done in MI³?

- Locate the desired station by searching on either **COOP ID** or **NAME**. If using a COOP ID, make sure you remove the '-'.
- Select from the **ADMIN** tab **STATION UTILITIES**, then **CHANGE STATION STATUS**
- Acquire a lock on the station by selecting **OK**

At this point the source document will pop-up containing Source information which you will need to fill out.

- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #** as **4**
- Select **PROVIDED BY – NWS**
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **03. REESTABLISH A STATION (COMPATIBLE)**
- Enter *REMARKS* from the B44 into the **REMARKS** field
- Select **SAVE**

At this point you are back on the Change Current Status page:

- Choose **OPEN** from the **CHANGE STATION STATUS** drop-down box
- Select **CHANGE STATUS**

Next go to the **IDENTITY** tab

Select the **NETWORKS** subtab

- Choose **UPDATE RECORDS**
- Verify that the current values are correct. If not then choose the current record that needs updated and enter current **NETWORK**. In this case you will choose from the drop down box **B**.
- Click **SAVE CHANGES**
- Click **COMMIT ALL CHANGES**

- Select **STATION ID** subtab
- Verify that the current values are still correct. If not then choose the **ID TYPE** and select the current record that needs updated In this case you will need to correct the current NWSLI
- Select **NWSLI** from the **ID TYPE** drop down box
- Enter **NWSLI** provided by B44 rendition #4.
- Click **SAVE CHANGES**
- Click **COMMIT ALL CHANGES**

Next go to the **LOCATION** tab

- Choose the **LOCATION** subtab and using the current record update the **REPORT LAT** and **REPORT LON** to the correct values and if necessary change the **REPORT LAN/LON UNITS, COUNTY, TIME ZONE,** and **DRIVING DIRECTIONS.**
- Select **SAVE**
- Click **COMMIT ALL CHANGES**

Choose the **ELEVATION** subtab

- Select current record and update the **ELEVATION**
- Enter the ELEVATION provided by B44, in this case you would enter **3761** feet into both the **ELEVATION** field and the **REPORT ELEVATION** field
- Click **SAVE CHANGES**
- Click **COMMIT ALL CHANGES**

- Choose the **OBSTRUCTIONS** subtab and using the current record update the fields to the correct values. If a current OBSTRUCTION record does not exist, choose "**ADD A NEW RECORD**" and populate the record with all known values.
- Select **SAVE**
- Repeat for all obstructions
- Click **COMMIT ALL CHANGES**

Next go to the **OBSERVER** tab

- Verify that the current values are still correct. If not then choose the **INVOLVED PARTIES** subtab and select the current record. Click on the **PARTY(TYPE)** field and the Change Station Party window will popup.
- Select a name from the list or search for the observer needed. If they don't exist then choose "**Add New**" and add the record. After completing the observer selection choose **SELECT** and that value will be populated in the **PARTY(TYPE)** field.
- select the **ROLE** this observer plays
- Select **SAVE**
- If another role needs to be added(such as a backup observer) and one does not exist for the current record, select "**ADD A NEW RECORD**" and follow the same procedure as above in choosing a **PARTY(TYPE)**, **ROLE** and **NETWORK**
- Click **ADD RECORD**
- After adding all relevant observers, click **COMMIT ALL CHANGES**

Next go to the **DATA PROD** tab

- Choose **STN DATA PRODUCTS** subtab
- Verify that the current records are correct. Should only be reporting in the **CD**. If not, enter an end date on any other data products that should not be open.
- If no data products are provided you will need to click "**ADD NEW RECORD**".
- Choose the current network under **NETWORK** drop down box
- Select the **DATA PRODUCT** from the drop down box that corresponds with the station publication.
- Click **ADD RECORD**
- Choose **COMMIT ALL CHANGES**

Next go to the **DATA PRG** tab

- Choose **STN DATA PROGRAMS** subtab
- Verify that the current records are still correct and that there is a record with **COOP SOD**.
- If no data program is provided you will need to click "**ADD NEW RECORD**".
- Choose the current network under **NETWORK** drop down box
- Select the **DATA PROGRAM** from the drop down box that corresponds with the station publication.
- Click **ADD RECORD**
- Choose **COMMIT ALL CHANGES**

Next go to the **EQUIP** tab

- Choose the **EQUIPMENT** subtab
- Verify that the Pieces of equipment with the current end date of 12/31/9999 are still valid. If not, change the end dates or delete them if necessary.
- Select "**ADD A NEW RECORD**" and populate all reported data for the piece of equipment that needs to be added including the **MODEL NAME/NUMBER/MANUF** field which is where you choose the piece of equipment to add. Most importantly make

sure you populate the fields marked in **RED**. These would be the **NETWORK** where you would select the record with the current end date of 12/31/9999 and also **BEGIN DATE** and **END DATE** which are pre-populated with the begin and end dates used in your information source. If **AZIMUTH/DISTANCE** is given for pieces of equipment add the information to the appropriate fields as well.

- Click **ADD RECORD**
- Next, add the next piece of equipment the same way and continue until all pieces of equipment are added.
- After all pieces of equipment have been added Click **COMMIT ALL CHANGES**

Next go to the **PHENOM** tab

- Choose the **PHENOMENON** subtab and verify that PRECIPITATION and TEMPERATURE are present with the current **END DATE**. If not, select "**ADD A NEW RECORD**" and create both of them.
- After both have been added Click **COMMIT ALL CHANGES**

- Choose the **PROTOCOL** subtab and verify that PRECIPITATION and TEMPERATURE are present with the current **END DATES** and correct **DATA PROGRAM** of COOP SOD. If not, select "ADD A NEW RECORD" and create them with all known values
- After all records have been added or changed Click **COMMIT ALL CHANGES**

- Choose the **SCHEDULE** subtab and verify that PRECIPITATION and TEMPERATURE are present with the current **END DATES** and correct **DATA PROGRAM** of COOP SOD. Also make sure that the **OBSERVATION TIME** is correct. If no current record exists, then select "**ADD A NEW RECORD**" and create them with all known values.
- Click **ADD RECORD** or **SAVE**
- Repeat the above steps until all observation times have been added for each phenomenon record.
- Click **COMMIT ALL CHANGES**

- Select the EQUIPMENT subtab and verify that the current records are correct for each data program and piece of equipment. If they are not then delete the incorrect record.
- Select "**ADD A NEW RECORD**" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the current record for the PRECIPITATION phenomenon and COOP SOD data program.
- Select the corresponding **EQUIPMENT** record that you added previously. In this case it would be the SRG with the current end date.
- Add the **PRIORITY** value for the record, which would be 1 for primary.
- Click **ADD RECORD**

- Select "**ADD A NEW RECORD**" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the current record for the TEMPERATURE phenomenon and COOP SOD data program.
- Select the corresponding **EQUIPMENT** record that you added previously. In this case it would be the MMTS with the current end date.
- Add the **PRIORITY** value for the record, which would be 1 for primary.
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Select the **DATA PRODUCTS** subtab and verify that the current Data Product records are still correct. If not then delete the record
- Select "**ADD A NEW RECORD**" and select the current record from **PHENOMENA/PROGRAM/FREQUENCY** and the current record from **DATA PRODUCT**
- Click **ADD RECORD**
- Repeat for each Data product
- Click **COMMIT ALL CHANGES**

- Select the **RPT METHOD** subtab and verify that the current Data Product records are still correct. If not then delete the record
- Select "**ADD A NEW RECORD**" and select the current record from **PHENOMENA/PROGRAM/FREQUENCY** and the correct value from **REPORTING METHOD**
- Click **ADD RECORD**
- Repeat for each Reporting Method
- Click **COMMIT ALL CHANGES**

- Select the **REC PARTY** subtab and verify that the current Recipient records are still correct. If not then delete the record
- Select "**ADD A NEW RECORD**" and select the current record from **OBSERVATION REPORTING METHOD** and click the **PARTY(TYPE)** field. From this popup window select the correct recipient and choose **SELECT**
- Click **ADD RECORD**
- Repeat for each Receiving Party
- Click **COMMIT ALL CHANGES**

- Select the **PERIOD OF RECORD** subtab and verify that the current Period of Record records are still correct. If not then modify the end date or delete if necessary

Next got to the **ADMIN** tab

- Click on **ADMINISTRATION** and verify that the current records are still correct. If not then modify the end date or delete them

Finally

- Review and **COMMIT** any missed changes by selecting items via the **UNCOMMITTED CHANGES** link in the header. If none were missed this link will not be visible.
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header

Scenario 7 – Localized Equipment Move (compatible and same name)

Station 04-5242 Mad River 12 SE, CA

Rendition 5 submitted to 05. LOCALIZED EQUIP MOVE (COMPATIBLE&SAME NAME)

What are the steps required for the Localized Equip Move?

- Enter Rendition number
- Change Latitude
- Enter Reason for Report
- Enter Remarks
- Enter Equipment move of 80 feet South
- Enter Effective Date
- Enter Obstructions changes

How is it done in MI³?

- Locate the desired station by searching on either **COOP ID** or **NAME**. If using a COOP ID, make sure you remove the '-'.

Choose the LOCATION tab, select **UPDATE RECORDS**

- Acquire a lock on the station by selecting **OK**

At this point the source document will pop-up containing Source information which you will need to fill out.

- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #** as **5**
- Select **PROVIDED BY – NWS**
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **05. LOCALIZED EQUIP MOVE (COMPATIBLE&SAME NAME)**
- Enter *REMARKS* from the B44 into the **REMARKS** field
- In DESCRIPTION, add the detailed documentation concerning the equipment move.
- Select **SAVE**

- Choose the LOCATION subtab and using the current record update the **END DATE** to the effective date of the B44
- Choose "ADD A NEW RECORD" and fill in all known values. Most can be copied from the previous record. Update the **REPORT LAT** and **REPORT LON** to the correct values and the **REPORT LAN/LON UNITS**. Most importantly make sure you populate the fields marked in **RED**. That would be **LOCATION TYPE** which will be "FIXED", **NETWORK**, which will be the current record in the drop down list and the **BEGIN DATE** and **END DATE** which will be pre-populated
- Select **SAVE**

- Click **COMMIT ALL CHANGES**

- Choose the RELOCATION subtab
- Choose "ADD A NEW RECORD" and fill in all known values. In the **DISTANCE FROM PREVIOUS** put the value 80, in **UNITS** choose Feet and in **DIRECTION** put SOUTH.
- From the **LOCATION LAT/LON** pull down, select the record which the relates to

- Choose the OBSTRUCTION subtab
- Identify the current records for the obstructions and update **ELEVATION UNITS, ELEV ANGLE, AZIMUTH, DISTANCE, DESCRIPTION** and others.
- Click **COMMIT ALL CHANGES**

Next go to the Equipment tab

- Choose the EQUIPMENT subtab
- Identify the current record which moved and update the **END DATE** to the effective date of the B44
- Select **SAVE**
- Select "ADD A NEW RECORD" and populate all reported data for the piece of equipment which moved including the **AZIMUTH** and **DISTANCE** representing the move. Most importantly make sure you populate the fields marked in **RED**. These would be the **NETWORK** where you would select the record with the current end date of 12/31/9999 and also **BEGIN DATE** and **END DATE** which are pre-populated with the begin and end dates used in your information source.
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Next go to the Phenom tab

- Select the EQUIPMENT subtab and update the **END DATE** to the effective date of the B44 for the current record for the piece of equipment which moved. .
- Select "ADD A NEW RECORD" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the record corresponding to the current record for the piece of equipment which moved
- Select the corresponding **EQUIPMENT** record that you added previously
- Add the **PRIORITY** value for the record
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Finally

- Review and **COMMIT** any missed changes by selecting items via the **UNCOMMITTED CHANGES** link in the header. If none were missed this link will not be visible.
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header

Scenario 8 – Change

Station 50-2968 Fairbanks Intl AP, AK

Rendition 5 submitted to 10. CHANGE OBSERVER, also correct station info for ASOS site.

- Enter Rendition number
- Change Station coop name and short name
- Change Latitude and longitude
- Change Elevation
- Add County
- Add COOP network
- Add Time Zone
- Change station manager
- Change Observer and add Observer short name
- Add Topography
- Enter Reason for Report
- Enter Remarks
- Add NCDC as Recipient for both Precipitation and Temperature date
- Change Equipment UNIV to TB as being used for both Daily Precipitation in CD and Hourly Precipitation in HPD
- Change Equipment UNKNOWN to HYGR (ATEMP on document) as being used for Daily Temperature in CD
- Add SRG, as Backup Precipitation equipment
- Add PSY as Backup Temperature equipment
- Add Azimuth/Distance of HYGR (ATEMP on document)
- Add Azimuth/Distance of PSY

How is it done in MI^3?

- Locate the desired station by searching on either **COOP ID** or **NAME**. If using a COOP ID, make sure you remove the '-'.

Choose the IDENTITY tab and select **UPDATE RECORDS**

- Acquire a lock on the station by selecting **OK**

At this point the source document will pop-up containing Source information which you will need to fill out.

- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #** as **5**
- Select **PROVIDED BY – NWS**
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **10. CHANGE OBSERVER**
- Enter *REMARKS* from the B44 into the **REMARKS** field

- Select **SAVE**

- Choose the STN NAME subtab and using the current record for "COOP NAME" and "SHORT NAME" update the **END DATE** to the effective date of the B44
- Choose "ADD A NEW RECORD" and select the current **NETWORK** record and populate the **NAME** and **SHORT NAME** and choose the **NAME TYPE** for "COOP" and add the new coop name.
- Click **ADD RECORD**
- Choose "ADD A NEW RECORD" and select the current **NETWORK** record and populate the **NAME** and **SHORT NAME** and choose the **NAME TYPE** for "SHORT NAME" and add the new short name.
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Select the LOCATION tab

- Choose the LOCATION subtab and using the current record update the **END DATE** to the effective date of the B44
- Choose "ADD A NEW RECORD" and fill in all known values. Most can be copied from the previous record. Update the **REPORT LAT** and **REPORT LON** to the correct values and the **REPORT LAN/LON UNITS**. Also Select the appropriate **TIMEZONE** and update the **COUNTY** by clicking on the **COUNTY** field. This will bring up a select box allowing you to choose a valid county from the available county list for that state. Most importantly make sure you populate the fields marked in **RED**. That would be **LOCATION TYPE** which will be "FIXED", **NETWORK**, which will be the current record in the drop down list and the **BEGIN DATE** and **END DATE** which will be pre-populated
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Choose the ELEVATION subtab and find the current record. Update the current record with the appropriate **REFERENCE POINT, EQUIP/POSITIONING METHOD, REPORT ELEVATION, REPORT FEET, MEASUREMENT DATE, DATUM, ELEVATION UNITS** and select the current **NETWORK**
- Select **SAVE**
- Click **COMMIT ALL CHANGES**

- Choose the TOPOGRAPHY subtab
- Identify the current record update the **DESCRIPTION**
- Select **SAVE**
- Click **COMMIT ALL CHANGES**

Next go to the Observer tab

- Select the INVOLVED PARTIES subtab
- select the current record and update the **END DATE** to the effective date of the B44

- Select **SAVE**
- Choose "ADD A NEW RECORD" Click on the **PARTY(TYPE)** field and the Add Station Party window will popup.
- Select a name from the list or search for the observer needed. If they don't exist then choose "Add New" and add the record making sure to fill out the short name. After completing the observer selection choose SELECT and that value will be populated in the **PARTY(TYPE)** field.
- Select the **ROLE** this observer plays
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Next go to the Data Prod tab

- Verify that the current records are still correct. If not then modify the end date or delete them if necessary.

Next go to the Data Prg tab

- Verify that the current records are still correct. If not then modify the end date or delete them if necessary.

Next go to the Equipment tab

- Choose the EQUIPMENT subtab
- Identify the current record for UNIV and update the **END DATE** with the current B44 Effective date
- Select **SAVE**
- Identify the current record for UNKNOWN and update the **END DATE** with the current B44 Effective date
- Select **SAVE**
- Select "ADD A NEW RECORD" and populate all reported data for the TB including the **AZIMUTH** and **DISTANCE**. Most importantly make sure you populate the fields marked in **RED**. These would be the **NETWORK** where you would select the record with the current end date of 12/31/9999 and also **BEGIN DATE** and **END DATE** which are pre-populated with the begin and end dates used in your information source.
- Click **ADD RECORD**
- Select "ADD A NEW RECORD" and populate all reported data for the HYGR including the **AZIMUTH** and **DISTANCE**. Most importantly make sure you populate the fields marked in **RED**. These would be the **NETWORK** where you would select the record with the current end date of 12/31/9999 and also **BEGIN DATE** and **END DATE** which are pre-populated with the begin and end dates used in your information source.
- Click **ADD RECORD**
- Select "ADD A NEW RECORD" and populate all reported data for the SRG. Most importantly make sure you populate the fields marked in **RED**. These would be the **NETWORK** where you would select the record with the current end date of

12/31/9999 and also **BEGIN DATE** and **END DATE** which are pre-populated with the begin and end dates used in your information source.

- Click **ADD RECORD**
- Select "ADD A NEW RECORD" and populate all reported data for the PSY including the **AZIMUTH** and **DISTANCE**. Most importantly make sure you populate the fields marked in **RED**. These would be the **NETWORK** where you would select the record with the current end date of 12/31/9999 and also **BEGIN DATE** and **END DATE** which are pre-populated with the begin and end dates used in your information source.
- Click **ADD RECORD**
- After all pieces of equipment have been added Click **COMMIT ALL CHANGES**

Next go to the Phenom tab

- Select the PROTOCOL subtab
- Select "ADD A NEW RECORD" and from the **PHENOMENA** list choose the PRECIPITATION value
- Select COOP SOD from **DATA PROGRAM** and any other information that may be available
- Select **ADD RECORD**
- Select "ADD A NEW RECORD" and from the **PHENOMENA** list choose the TEMPERATURE value
- Select COOP SOD from **DATA PROGRAM** and any other information that may be available
- Select **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Select the SCHEDULE subtab
- Select "ADD A NEW RECORD" and select from the **PHENOMENA/PROGRAM/FREQUENCY** drop down list for the current record for Precipitation and corresponding to the SRG backup piece of equipment. Populate the **OBSERVATION TIME**
- Click **ADD RECORD**
- Repeat for TEMPERATURE record corresponding to the backup PSY
- Click **COMMIT ALL CHANGES**

- Select the EQUIPMENT subtab and select the current record for the UNIV piece of equipment for the COOP SOD data program. Change the END DATE to the B44 Effective Date
- Select "ADD A NEW RECORD" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the current record for the PRECIPITATION phenomenon and COOP SOD data program.
- Select the corresponding **EQUIPMENT** record that you added previously. In this case it would be the TB with the current end date.
- Add the **PRIORITY** value for the record, which would be 1 for primary.
- Click **ADD RECORD**

- Select the current record for the UNIV piece of equipment for the COOP HPD data program. Change the END DATE to the B44 Effective Date
- Select "ADD A NEW RECORD" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the current record for the PRECIPITATION phenomenon and COOP HPD data program.
- Select the corresponding **EQUIPMENT** record that you added previously. In this case it would be the TB with the current end date.
- Add the **PRIORITY** value for the record, which would be 1 for primary.
- Click **ADD RECORD**
- Select the current record for the UNKNOWN piece of equipment for the COOP SOD data program. Change the END DATE to the B44 Effective Date
- Select "ADD A NEW RECORD" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the current record for the TEMPERATURE phenomenon and COOP SOD data program.
- Select the corresponding **EQUIPMENT** record that you added previously. In this case it would be the HYGR with the current end date.
- Add the **PRIORITY** value for the record, which would be 1 for primary.
- Click **ADD RECORD**
- Select "ADD A NEW RECORD" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the current record for the PRECIPITATION phenomenon and COOP SOD data program.
- Select the corresponding **EQUIPMENT** record that you added previously. In this case it would be the SRG with the current end date.
- Add the **PRIORITY** value for the record, which would be 2 for backup.
- Click **ADD RECORD**
- Select "ADD A NEW RECORD" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the current record for the TEMPERATURE phenomenon and COOP SOD data program.
- Select the corresponding **EQUIPMENT** record that you added previously. In this case it would be the PSY with the current end date.
- Add the **PRIORITY** value for the record, which would be 2 for backup
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Select the REC PARTY subtab
- Select "ADD A NEW RECORD" and Click on the PARTY field which will popup a window containing party information. Select the correct party for NCDC and choose SELECT
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Next got to the Admin tab

- Click on ADMINISTRATION and verify that the current records are still correct. If not then modify the end date

- Select "ADD A NEW RECORD" and Click on the PARTY field which will popup a window containing party information. Select the correct party or add if necessary and choose SELECT
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Finally

- Review and **COMMIT** any missed changes by selecting items via the **UNCOMMITTED CHANGES** link in the header. If none were missed this link will not be visible.
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header

Scenario 9 – Change

Station 09-0969 Blairsville Exp Station, GA

Rendition 10 submitted to CHANGE to update RDP reporting of Soil Temps.

Soil is to be published and there are 2 plots:

- **1st plot is 4 inch depth MAX/MIN, soil cover is BARE, OBS Time 0800**
- **2nd plot is 2 inch, 4 inch, 8 inch depth AT OBS Time, Soil cover is SOD, Obs Times are 0800 and 1700. All other info for soils are same.**

What steps are taken in MI3 to make these changes?

Locate the desired station by searching on either **COOP ID** or **NAME**. If using a COOP ID, make sure you remove the '-'.

Acquire a lock on the station by selecting OK

At this point the source document will pop-up containing Source information which you will need to fill out.

- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #** as **10**
- Select **PROVIDED BY – NWS**
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **10. CHANGE**
- Enter *REMARKS* from the B44 into the **REMARKS** field
- Select **SAVE**

Soil is to be published and there are 2 plots:

- **1st plot is 4 inch depth MAX/MIN, soil cover is BARE, OBS Time 0800**

To add soil data for MAX/MIN:

1st Plot

EQUIP tab

- **EQUIP** sub tab
- **UPDATE RECORDS**
- **ADD NEW RECORD**
- Select appropriate *NETWORK*
- Enter *Serial Number* *
- Select appropriate *Model Name/Number/Man*. Example: *Palmer*
- *Official Value* entered will be 1
- *Preferred Val* entered will be 1
- Enter the *Azimuth* *
- Enter the *Distance Units* *
- Enter *Distance* *

- Enter *Slope* Example: 05 N
- From the drop down box, Select the correct *Soil Type*
- Select appropriate *Ground Cover* ex: 3/Bare Ground
- Choose **ADD RECORD**
- **COMMIT ALL CHANGES**

NEXT
- Click Sub Tab **ELEVATION**
- **ADD NEW RECORD**
- Select appropriate entry from *Equipment* drop down box
- Select appropriate *Elevation Unit* (inches)
- Select appropriate *Elevation Type* (Distance Below Surface)
- Select Elevation, which will actually be the DEPTH, in this case you will put a 4 for the 4 inch depth
- Choose **ADD RECORD**
- **COMMIT ALL CHANGES**

NEXT
Click **PHENOM** tab
- Click Sub Tab **PHENOMENA**
- **ADD NEW RECORD**
- Click the appropriate selection from *Phenomenon* In this case you would choose 'Soil Max/Min Temperature'
- Choose **ADD RECORD**
- **COMMIT ALL CHANGES**

- Choose **PROTOCOL** subtab
- From the **PHENOMENA** drop down box select the 'SOIL MAX/MIN TEMPERATURE'
- At this point a pop up will appear giving you a choice to select the appropriate plot and depth. The values presented correspond to the values in Equipment Elevation page. CLICK the appropriate value corresponding the correct plot#, Depth and Begin/End Dates**. SET SOIL DEPTH**. The Offset/Depth will automatically populate after that.
- Click appropriate selection from *Data Program*. For Soil Entries this would be 'COOP SOD'
- Select appropriate *Units* (Depth/Inches/Fahrenheit)
- Select the correct *Frequency*
- Choose **ADD RECORD**
- **COMMIT ALL CHANGES**

- **SCHEDULE** Sub Tab
- Click **ADD NEW RECORD**
- Select the appropriate *Phenomena/Program/Frequency*
- Enter the *Observation* Time which is 0800
- Choose **ADD RECORD**

- **COMMIT ALL CHANGES**

NEXT

- **EQUIPMENT** Sub Tab
- **ADD NEW RECORD**
- From the drop down select appropriate *Phenomena/Program/Frequency*
- Select appropriate piece of *Equipment* corresponding to the piece of equipment which will be making the observation, paying close attention that it has the correct END DATE
- Enter 1 under *Priority*
- **SAVE CHANGES**
- **COMMIT ALL CHANGES**

- **DATA PRODUCTS** Sub Tab
- **ADD NEW RECORD**
- Here again make appropriate selection from *Phenomena/Program/Frequency*
- Select appropriate *Data Product* which will be the COOP SOD
- Choose **ADD RECORD**
- **COMMIT ALL CHANGES**

- **RPT METHOD** Sub Tab
- **ADD NEW RECORD**
- Click appropriate *Phenomena/Program/Frequency*
- Click appropriate *Reporting Method* from drop down (RDP in this case)
- **SAVE CHANGES**
- **COMMIT ALL CHANGES**

- **REC PARTY** Sub Tab
- Click **ADD NEW RECORD**
- Select the appropriate *Phenomena/Program/Frequency/Reporting Method*
- Click the **PARTY** field and choose/Add the correct Party. If there are multiples then repeat this step.
- **ADD RECORD**
- **COMMIT ALL CHANGES**

To add soil data for Temp at Obs:
2nd Plot
2 inch, 4 inch, 8 inch depth AT OBS Time, Soil cover is SOD, Obs Times are 0800 and 1700. All other info for soils are same.

- **EQUIP** tab
- **EQUIP** sub tab
- **ADD NEW RECORD**
- Select appropriate *Network*
- Enter *Serial Number* *

- Select appropriate *Model Name/Number/Man*. Example: Frontier
- *Official Value* entered will be 1
- *Preferred Val* entered will be 1
- Enter the *Azimuth* *
- Enter the *Distance Units* *
- Enter *Distance* *
- Enter *Slope* example: 05 N
- From the drop down box, Select the correct **SOIL TYPE**
- Select appropriate *Ground Cover* ex: 3/Bare Ground
- **ADD RECORD**
- **COMMIT ALL CHANGES**

NEXT

- **ELEVATION**
- **ADD NEW RECORD**
- Select appropriate entry from *Equipment* drop down box
- Select appropriate *Elevation Unit* (inches)
- Select appropriate *Elevation Type* (Distance Below Surface)
- Select *Elevation*, which will actually be the *DEPTH*
- Choose **ADD RECORD**

This step will be repeated for each depth. In this case it will be entered three times. The information will be added as two pieces of equipment. Example: Frontier 1 & Frontier 2. Although the same piece of equipment is being used, each plot will be a separate entry. If there is a serial number, the same one will be used for each entry.

- **COMMIT ALL CHANGES**

NEXT

- Click **PHENOM** tab
- Click Sub Tab **PHENOMENA**
- Click **ADD NEW RECORD**
- Click the appropriate selection from *Phenomenon*, which will be 'SOIL- TEMP AT OBS'
- Choose **ADD RECORD**
- **COMMIT ALL CHANGES**

- Choose **PROTOCOL** subtab
- From the **PHENOMENA** drop down box select the 'SOIL TEMP AT OBS'
- At this point a pop up will appear giving you a choice to select the appropriate plot and depth. The values presented correspond to the values in Equipment Elevation page. CLICK the appropriate value corresponding the correct plot#, Depth and Begin/End Dates**. SET SOIL DEPTH**. The Offset/Depth will automatically populate after that.
- Click appropriate selection from *Data Program*. For Soil Entries this would be 'COOP SOD'
- Click appropriate *Units* (Depth/Inches/Fahrenheit)

- Click the correct *Frequency*
- Choose **ADD RECORD**
- **COMMIT ALL CHANGES**
  This step will be repeated for each depth. There will be one depth for each piece of equipment.

NEXT
- **SCHEDULE** Sub Tab
- Click **ADD NEW RECORD**
- Click appropriate *Phenomena/Program/Frequency*
- Enter the *Observation Time*
- Choose **ADD RECORD**
- **COMMIT ALL CHANGES**
  This step will be repeated for each depth.

NEXT
- **EQUIPMENT** Sub Tab
- Click **ADD NEW RECORD**
- From the drop down select appropriate *frequency*
- Select appropriate piece of *Equipment*
- Enter 1 under *Priority*
- **SAVE CHANGES**
- **COMMIT ALL CHANGES**
  This step will be repeated for each depth.

- **DATA PRODUCTS** Sub Tab
- **ADD NEW RECORD**
- Here again make appropriate selection *from Phenomena/Program/Frequency*
- Select appropriate *Data Product*
- Choose **ADD RECORD**
- **COMMIT ALL CHANGES**
  This step will be repeated for each depth. In this case it will be entered three times.

- **RPT METHOD** Sub Tab
- ADD NEW RECORD
- Click appropriate *Phenomena/Program/Frequency*
- Click appropriate *Reporting Method* from drop down (RDP in this case)
- **SAVE CHANGES**
- **COMMIT ALL CHANGES**

This step will be repeated for each depth.

- **REC PARTY** Sub Tab
- Click **ADD NEW RECORD**
- Select the appropriate *Phenomena/Program/Frequency/Reporting Method*

- Click the **PARTY** field and choose/Add the correct Party. If there are multiples then repeat this step.
- Choose **ADD RECORD**
- **COMMIT ALL CHANGES**

Scenario 10 – Change

Station 09-7087 Plains SW GA Exp Station, GA

Rendition 10 submitted to CHANGE to update RDP Reporting Elements.

What are the steps taken in MI3 to make these changes?

- Enter Rendition number
- Enter Reason for Report
- Enter Remarks
- Enter Effective date
- Add MONEL (H) from Other Equip Info. This is a second piece of Evap equipment. Evap is published from EVAP-C already in station history.

How is it done in MI3?

- Locate the desired station by searching on either **COOP ID** or **NAME**. If using a COOP ID, make sure you remove the '-'.

Choose the PHENOM tab and select **UPDATE RECORDS**

- Acquire a lock on the station by selecting **OK**

At this point the source document will pop-up containing Source information which you will need to fill out.

- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #** as **10**
- Select **PROVIDED BY – NWS**
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **10. CHANGE**
- Enter *REMARKS* from the B44 into the **REMARKS** field
- Select **SAVE**

- Choose the PHENOM tab
- Select the EQUIPMENT subtab
- "ADD A NEW RECORD" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the record corresponding to the current record for EVAPORATION
- Select the corresponding **EQUIPMENT** record for evaporation. In this case it would be the MONEL PAN, HOOK GAGE with the current end date.
- Add the **PRIORITY** value for the record, which would be 2 for Backup.
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Select the RPT METHOD subtab and verify current records. Select "ADD A NEW RECORD" and add records that correspond to the update of RDP reporting elements.
- After all reporting methods have been added Click **COMMIT ALL CHANGES**

Finally

- Review and **COMMIT** any missed changes by selecting items via the **UNCOMMITTED CHANGES** link in the header. If none were missed this link will not be visible.
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header

Scenario 11 – Change

Station has been publishing Temp and Precipitation in CD publication.
Observations have been bad and NWS is stopping publication of CD.
Station is remaining open with all equipment.

What steps are made to stop CD Publication of both Temp and Precipitation and where are these changes made in MI3?

How is it done in MI3?

- Locate the desired station by searching on either **COOP ID** or **NAME**. If using a COOP ID, make sure you remove the '-'.

Choose the **DATA PROD** tab and select **UPDATE RECORDS**

- Acquire a lock on the station by selecting **OK**

At this point the source document will pop-up containing Source information which you will need to fill out.

- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #**
- Select **PROVIDED BY – NWS**
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **10. CHANGE**
- Enter *REMARKS* from the B44 into the **REMARKS** field
- Select **SAVE**

Choose the **DATA PROD** tab

- Select **STN DATA PRODUCTS**
- Enter the effective provided by the B44 into the END DATE field of Climatological data to close out this record.
- Click **SAVE CHANGES**
- Click **COMMIT ALL CHANGES**

Next go to the **DATA PRG** tab

- Choose **STN DATA PROGRAMS** subtab
- Enter the effective date provided by the B44 into the END DATE field of Coop SOD to close out this record.
- Click **SAVE CHANGES**
- Click **COMMIT ALL CHANGES**

Next go to the **PHENOM** tab
Select the **DATA PRODUCTS** subtab

- Select the **PHENOMENA/PROGRAM/FREQUENCY** field that has Temperature/coop sod/daily with an end date of 9999/12/31.
- Enter the effective date provided by the B44 into the **END DATE** field to close out this record.
- Click **SAVE CHANGES**
- Select the **PHENOMENA/PROGRAM/FREQUENCY** field that has Precipitation/coop sod/daily with an end date of 9999/12/31.
- Enter the effective date provided by the B44 into the **END DATE** field to close out this record.
- Click **SAVE CHANGES**
- Click **COMMIT ALL CHANGES**

Finally

- Review and **COMMIT any** missed changes by selecting items via the **UNCOMMITTED CHANGES** link in the header. If none were missed this link will not be visible.
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header

Scenario 12 – Change

Station has been publishing Temperature and Precipitation in CD publication and is also a River station.
Equipment SRG and MXMN with CRS is being removed from station and Publication of CD stopped. River equipment remains.

What are steps to remove equipment and stop CD publication and where are changes made in MI3?

- Locate the desired station by searching on either **COOP ID** or **NAME**. If using a COOP ID, make sure you remove the '-'.

Choose the **EQUIP** tab
select UPDATE RECORDS

- Acquire a lock on the station by selecting **OK**

At this point the source document will pop-up containing Source information which you will need to fill out.

- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #**
- Select **PROVIDED BY – NWS**
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **10. CHANGE**
- Enter *REMARKS* from the B44 into the **REMARKS** field
- Select **SAVE**

- Choose the **EQUIPMENT** subtab
- Locate **SRG** equipment with current end date.
- Enter effective date provided by B44 into end date field
- Click **SAVE CHANGES**
- Repeat for each piece of equipment that will be deleted. In this case you will also need to put end dates on **MXMN** and **CRS**.
- After all pieces of equipment have been deleted click **COMMIT ALL CHANGES**.

Choose the **DATA PROD** tab

- Select **STN DATA PRODUCTS** subtab
- Enter the effective provided by the B44 into the **END DATE** field of Climatological data to close out this record.
- Click **SAVE CHANGES**
- Click **COMMIT ALL CHANGES**

- Next go to the **DATA PRG** tab
- Choose **STN DATA PROGRAMS** subtab
- Enter the effective date provided by the B44 into the END DATE field of Coop SOD to close out this record.
- Click **SAVE CHANGES**
- Click **COMMIT ALL CHANGES**

Next go to the **PHENOM** tab

- Select the **DATA PRODUCTS** subtab
- Select the **PHENOMENA/PROGRAM/FREQUENCY** field that has Temperature/coop sod/daily with an end date of 9999/12/31.
- Enter the effective date provided by the B44 into the **END DATE** field to close out this record.
- Click **SAVE CHANGES**
- Select the **PHENOMENA/PROGRAM/FREQUENCY** field that has Precipitation/coop sod/daily with an end date of 9999/12/31.
- Enter the effective date provided by the B44 into the **END DATE** field to close out this record.
- Click **SAVE CHANGES**
- Click **COMMIT ALL CHANGES**

Finally

- Review and **COMMIT any** missed changes by selecting items via the **UNCOMMITTED CHANGES** link in the header. If none were missed this link will not be visible.
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header

Scenario 13 – Change

Station is going to start publishing both Temperature and Precipitation in the CD. Station has been non-published, but both Temperature and Precipitation equipment exists at station.

What are steps to start CD Publication of both Temperature and Precipitation in the CD and where are changes made in MI3?

- Locate the desired station by searching on either **COOP ID** or **NAME**. If using a COOP ID, make sure you remove the '-'.

Choose the **DATA PROD** tab and select **UPDATE RECORDS**

- Acquire a lock on the station by selecting **OK**

  At this point the source document will pop-up containing Source information which you will need to fill out.
- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #**
- Select **PROVIDED BY – NWS**
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **10. CHANGE**
- Enter *REMARKS* from the B44 into the **REMARKS** field
- Select **SAVE**

Select the **STN DATA PRODUCTS** tab

- Choose "**ADD NEW RECORD**"
- Choose the current network under **NETWORK** drop down box
- Select the **DATA PRODUCT** from the drop down box that corresponds with the station publication. In this case it would be **CD**.
- Click **ADD RECORD**
- Choose **COMMIT ALL CHANGES**

Next go to the **DATA PRG** tab

- Choose **STN DATA PROGRAMS** subtab
- Choose "**ADD NEW RECORD**"
- Choose the current network under **NETWORK** drop down box
- Select the **DATA PROGRAM** from the drop down box that corresponds with the station publication. In this case it would be **COOP SOD**.
- Click **ADD RECORD**
- Choose **COMMIT ALL CHANGES**

Next go to the **PHENOM** tab

- Select the **DATA PRODUCTS** subtab

- Select "**ADD A NEW RECORD**" and select the current record from **PHENOMENA/PROGRAM/FREQUENCY** and the current record from **DATA PRODUCT**
- Click **ADD RECORD**
- Repeat for each Data product. In this case you should have two records with current end dates. **PRECIPITATION** and **TEMPERATURE**. **DATA PRODUCT** for both records will be **CD**.
- Click **COMMIT ALL CHANGES**

Finally

- Review and **COMMIT** any missed changes by selecting items via the **UNCOMMITTED CHANGES** link in the header. If none were missed this link will not be visible.
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header

Scenario 14 – Change

Station is going to add Evap to CD Publication. Already publishes Temperature and Precipitation. Evap equipment of MONEL (H) must be added with OBS time of 0800.

What are steps to add equipment and add element of Evap to CD Publication and where are changes made in MI3?

Locate the desired station by searching on either **COOP ID** or **NAME**. If using a COOP ID, make sure you remove the '-'.

Choose the **EQUIP** tab

- select UPDATE RECORDS
- Acquire a lock on the station by selecting **OK**

At this point the source document will pop-up containing Source information which you will need to fill out.

- Add the **SOURCE** for the document which will default to "B44 - - B44 COOP FORM"
- Enter **CURRENT REVISION/VERSION #**
- Select **PROVIDED BY – NWS**
- Enter *EFFECTIVE DATE* from the B44 into the **BEGIN DATE** and **EFFECTIVE DATE** fields
- Enter the **REASON** as **10. CHANGE**
- Enter *REMARKS* from the B44 into the **REMARKS** field
- Select **SAVE**

- Choose the **EQUIPMENT** subtab
- Select "**ADD A NEW RECORD**" and populate all reported data for the piece of equipment that needs to be added, in this case it would be the MONEL (H), including the **MODEL NAME/NUMBER/MANUF** field which is where you choose the piece of equipment to add. Most importantly make sure you populate the fields marked in **RED**. These would be the **NETWORK** where you would select the record with the current end date of 12/31/9999 and also **BEGIN DATE** and **END DATE** which are pre-populated with the begin and end dates used in your information source.
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

Go to the **PHENOM** tab

- Choose the **PHENOMENA** subtab
- Select "**ADD A NEW RECORD**"
- Select current **NETWORK**
- Choose **EVAPORATION** from the **PHENOMENON** drop down box
- Click **ADD RECORD**

- Click **COMMIT ALL CHANGES**

- Choose the **PROTOCOL** subtab
- Select "**ADD A NEW RECORD**"
- Select **EVAPORATION** with current date from **PHENOMENON** drop down box.
- Select COOP SOD/DAILY from DATA PROGRAM drop down box.
- Choose DAILY from FREQUENCY drop down box.
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Choose the **SCHEDULE** subtab
- Select "**ADD A NEW RECORD**"
- Select **EVAPORATION** with current date from **PHENOMENA/PROGRAM/FREQUENCY** drop down box.
- Enter **0800** into **OBSERVATION TIME** field
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Choose the **EQUIPMENT** subtab
- Select "**ADD A NEW RECORD**" and in the **PHENOMENA/PROGRAM/FREQUENCY** field select the current record for the EVAPORATION phenomena and COOP SOD data program.
- Select the corresponding **EQUIPMENT** record that you added previously. In this case it would be the MONEL (H) with the current end date.
- Add the **PRIORITY** value for the record, which would be 1 for primary.
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Choose **DATA PRODUCTS** subtab
- Select "**ADD A NEW RECORD**"
- Select **EVAPORATION** from **PHENOMENA/PROGRAM/FREQUENCY** and the corresponding current record from **DATA PRODUCT.** In this case it would be the **CD**.
- Click **ADD RECORD**
- Click **COMMIT ALL CHANGES**

- Select the **RPT METHOD** subtab
- Select "**ADD A NEW RECORD**" and select the **EVAPORATION** current record from **PHENOMENA/PROGRAM/FREQUENCY** and the correct value from **REPORTING METHOD**
- Click **ADD RECORD**
- Repeat for each Reporting Method for EVAPORATION.
- Click **COMMIT ALL CHANGES**

- Select the **REC PARTY** subtab

- Select "**ADD A NEW RECORD**" and select the **EVAPORATION** current record from **OBSERVATION REPORTING METHOD** and click the **PARTY(TYPE)** field. From this popup window select the correct recipient and choose SELECT
- Click **ADD RECORD**
- Repeat for each Receiving Party
- Click **COMMIT ALL CHANGES**

Finally

- Review and **COMMIT** any missed changes by selecting items via the **UNCOMMITTED CHANGES** link in the header. If none were missed this link will not be visible.
- Unlock the station by selecting **UNLOCK** in the header
- *OPTIONAL:* End the Info Source supplied by selecting **END** in the header